THEATRE CATALOG

8th
ANNUAL
ALL NEW
EDITION

1949-50

Featuring:
THE WORK OF S. CHARLES LEE, ARCHITECT

Complimentary Copy

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PAUL J. GREENHALGH,
Publishing Director

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EDITORIAL FOREWORD

A careful study of the pages that follow will disclose that this 8th ANNUAL EDITION of the Theatre Industry's incomparable authority on the physical theatre building has bent considerable attention to the accumulation of creditable facts about it, facts that were formerly only the merest "moonshine" of conjecture and estimate!

With no lessening of its usual painstaking attention to design, construction, maintenance, management, and equipment—and with its usual pictorial recording of the best construction of the previous year—this completely new 1949-50 edition marks the start of a continuing annual National Census (P. 482 to P. 489). From this first installment can be learned: (1) the industry's current use of 31,427,622 yards of carpeting; (2) the types of air cooling and air-conditioning now in use in 10,897 of the nation's 18,600 roofed theatres; (3) the 7,308,987 upholstered theatre chairs requiring 10,963,480 yards of fabric covering and 14,617,974 units of spring or rubber cushions, and many other positive facts about roofed theatres, their facilities, their confection vending, and their equipment.

Elsewhere in this volume will be found detailed listings of the 1,753 drive-ins that will serve the 1950 season (P. 253 to P. 274) representing a growth of nearly 1,500 during the past two years, or a total investment of nearly $200,000,000 in this one facet of the theatre field alone.

There will also be found conclusive proof that drive-ins open up motion picture entertainment to several millions of new patrons (P. 196 to P. 200) who, for reasons of children, physical handicaps, etc., could not previously attend roofed theatres. There is also a listing of the 238 architects and designers (P. 153 to P. 164) who owe a major part of their livelihood to the theatre building. And there is proof of the $225,154,800 share of the confection industry's annual gross (P. 486 to P. 489) transacted over theatre lobby stands.

Page after page, the thoughtful reader will ponder fact upon fact, and only one major conclusion is possible. What affects the theatre industry in the U. S. A. will affect the whole national economy! Adverse legislation, unfair taxation, bluenosed reforms, and onerous lawsuits strike at the pocketbooks and pay envelopes not only of industryites, but in varying important degrees at those hundreds of thousands of non-industryites in a myriad of fringe businesses from nurserymen and asphalt plants to the manufacturers of drapery fabrics and photoelectric cells.

By its very nature, and its place in American lives, the physical theatre building patronizes a greater number of suppliers and buys from a greater diversity of manufacturers than any other. It's a BIG industry! And the overnight success of 1,753 new drive-ins catering to a completely new patronage proves it has not yet accomplished its complete BIGNESS.

* * *

And a word about a continuing feature.

This 8th ANNUAL EDITION has singled out for special attention the work of one of the most prominent West Coast theatre architects, S. Charles Lee. In several cases, due to their colorful nature, Lee-designed theatres have been reproduced in full color so that the reader could grasp their full effectiveness. We are proud of this new *first* in motion picture trade journalism, and proud to present the type of work that Mr. Lee has contributed to the industry.

But to revert to our words in preceding volumes: the bows are accorded to Mr. Lee, but we know he will agree that the total credit should be shared by all of the hundreds of thousands of companies and individuals who have perfected the materials and products that have made possible the more than 20,000 fine theatre structures of America.

Paul Heinhalgt

1949-50

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THE CREST, Baltimore, Md.
THE COLORADO, Pasadena, Calif.
THE THREE LAKES, 3 Lakes, Wis.
THE UPTOWN, Harrisburg, Pa.
THE CITY LINE CENTER, Philadelphia, Pa.
THE ARLINGTON, Indianapolis, Ind.
THE CORNELL, Burbank, Calif.
THE MIRACLE, Coral Gables, Fla.
THE UNIVERSITY, Toronto, Canada
THE LINDENHURST, Long Island, N. Y.
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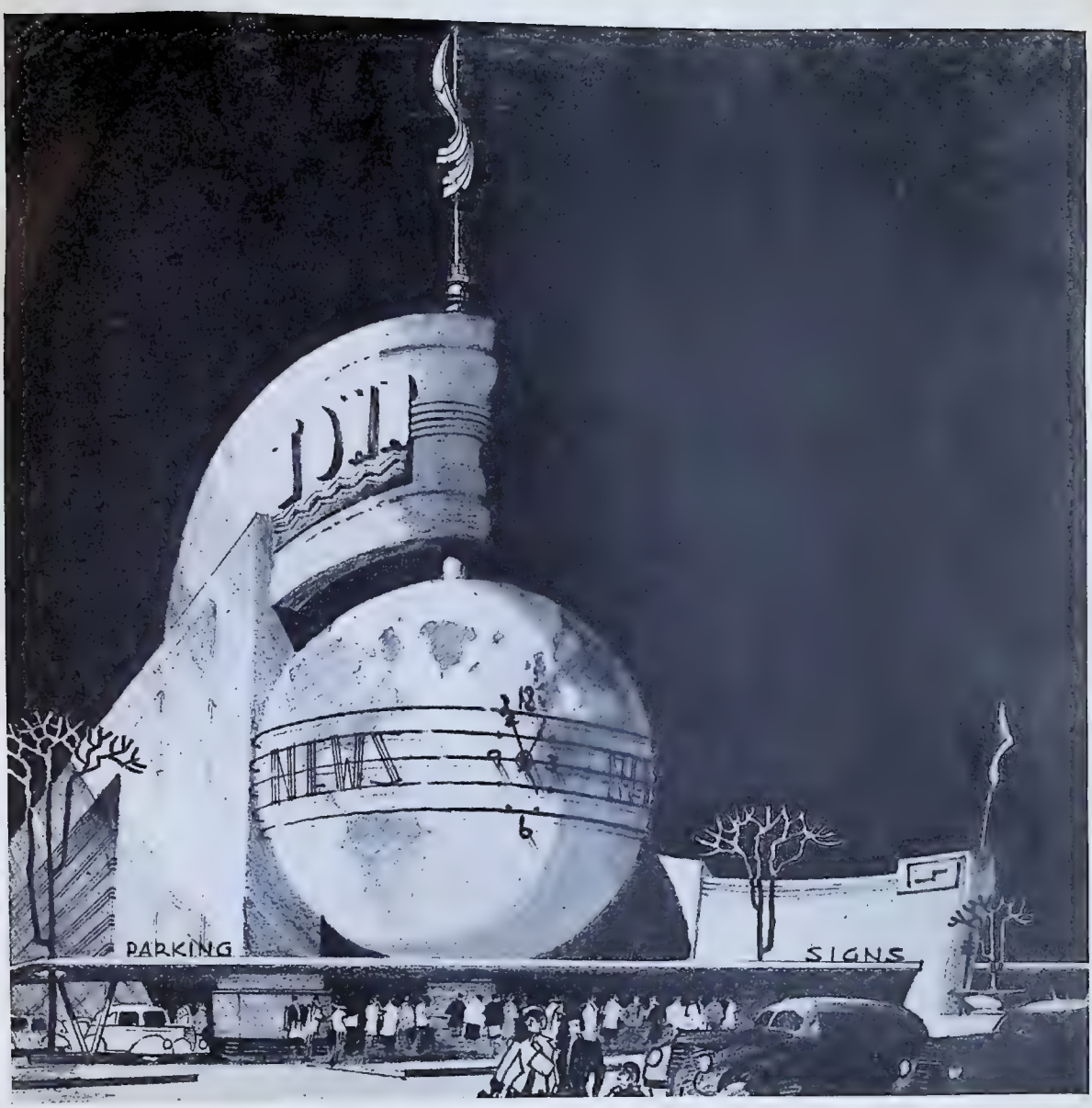
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A FUTURAMIC THEATRE FROM THE DRAWING BOARDS OF S. CHARLES LEE SHOWS A BOXOFFICE LOCATED UNDER A REVOLVING GLOBE.

THE WORK OF S. CHARLES LEE

The progress of civilization throughout the ages has been primarily due to the outstanding leaders of each century in every field of human endeavor. It is in the lives and accomplishments of these talented individuals that we see mirrored the spectacular rise of man from a primitive creature of Nature to a dominant force in the mysterious infinity of the universe.

In the same manner that a complete understanding of the development of drama down through the ages is not possible without a meticulous study of Shakespeare, so a full appreciation of the development of modern theatre design is not obtainable in the absence of a comprehensive knowledge of the works of the architects who have been responsible for its evolution. Their creative talents have been the guiding force in leading the theatre away from its primitive origins to the attractive, functional structure which it represents today.

Since the solemn avowed purpose of THEATRE CATALOG is to present to the industry the most exhaustive and valuable fund of theatre knowledge available, the editors decided to inaugurate, beginning with the 7th Annual (1948-49) Edition, a series of detailed discussions on the works of outstanding theatre architects. JOHN AND DREW EBERSON of New York were the first architects to be so studied, and in this edition THEATRE CATALOG proudly shifts its geographic scope to survey the works of an outstanding West Coast architect who has specialized in theatres—S. Charles Lee.



S. Charles Lee, . . . The Man

It seems as though one of Destiny's special handmaidens must have been at the bedside of his mother, when S. Charles Lee entered the world September 5, 1899, to mark out clearly the ordained path he was to follow in life. During his early childhood years, young Lee exhibited formidable signs of his natural aptitude for the mechanical and construction trades. As a result, he was selected from his grammar school class to be one of the first experimental students in the newly formed pre-vocational system instituted in Chicago, his birthplace.

At the tender age of 14, Lee built a full-scale, gasoline-powered automobile at a time when the modern car was still very much in the experimental stage. The widespread acclaim which the newspapers gave this feat as being a youthful achievement of vast ingenuity might have seemed to augur that the precocious lad would devote his talents to the mechanical design field. Lee, however, had already decided to dedicate his life to architecture and immediately directed his scholastic training toward the achievement of that goal.

During the course of his studies at Chicago Technical College, from which he graduated at 18, Lee first began to develop a keen interest in materials and their uses. The thoroughness and eagerness with which he pursued this new avocation are evidenced today in his unusually well-equipped sample room and his ability to select the proper item for a particular spot, both from a structural and a decorative standpoint.

Lee joined the other young men of his generation in answering the call to serve his country during World War I. When he was not on active fighting duty during his service in the U. S. Navy, he was attached to the Public Works Division of the Great Lakes Naval Training Station. Thus, even in war, Lee was able to contribute his rapidly developing structural skills to an important building program.

After his release from the armed forces, Lee designed several major projects as senior architect for the Park Board of the City of Chicago before enrolling for post-graduate work at Armour Institute of Technology. His time here was divided between classes in technical subjects and courses at the Chicago Art Institute. He continued with these studies until 1921, and the excellence of his record is attested by the many honorable mentions which his drawings won in the Ecole des Beaux Arts competitions which he entered. This period of additional study was an important one from a practical, formative point of view also, for during vacations Lee became intrigued with theatre architectural design while working for two firms best known for their creative work in the early days of theatre construction.

In the year 1922 Lee journeyed to Los Angeles and opened his own office for the general practice of architecture. Due to his strangeness in the territory and his boyish age, the young architect had a difficult time in attaining the immediate recognition he deserved. Gradually, however, although they were still reluctant to place much money at his command because of his age, clients came to recognize and admire the ingenious and dauntless way in which Lee attacked any type of problem.

The first overdue rung in the ladder to fame was laid in 1926 when a client presented a problem to which Lee found the panacea where others had failed. This particular entrepreneur had decided to build a theatre worth three quarters of a million dollars on an important corner of Los Angeles, but, due to restrictive building conditions resulting from the size of the lot and building ordinances, difficult architectural and construction obstacles had presented themselves. These barriers, which had stymied other architects, found a ready solution in Lee's gifted hands, and the project was completed in short order. The corner was soon reputed to be the most intensively developed spot in the country for its size.

This stellar achievement marked a decided turning point in Lee's career, for henceforth countless numbers of other theatre owners brought their problems to his doorstep. He was fully prepared to meet them, for in the meantime he had developed his faculties to the point where he was able to coordinate plan, design, and construction with consummate mastery. At the same time, he had grounded himself thoroughly in finances and their meaning to the theatre owner with respect to building costs, the demands of banks or loan institutions, and boxoffice receipts.

Although Lee carried on a general practice of architecture during the ensuing years, he devoted better than half his practice to the specialty of theatre design. His outstanding success in this field has been primarily achieved through his extraordinary ability to design theatres which incorporate the maximum in functional eye appeal, yet remain within the limitations of whatever budgets have been established for them. This remarkable business acumen, which admirably complements his artistic ability, explains Lee's election as an officer of some 12 corporations and the responsible managerial posts he holds in real estate, hotels, theatres, and other miscellaneous business enterprises. In spite of his participation in a widespread range of diverse activities, Lee continues to devote the major part of his time to the avowed and beloved duty of a master architect—the design of new and better buildings conforming to the functional needs of the owner.

Although S. Charles Lee is now in his 50's, he is still imbued with as much creative ambition as he possessed at 25. The demands made on his talents have from time to time compelled the establishment of as many as 15 offices in many cities some distance from Los Angeles. He transports himself to and from such offices in his own, self-piloted Beechcraft airplane. This speedy form of transportation has proven to be an invaluable asset to Lee in keeping in close touch with the numerous construction projects he has directed from San Francisco to Miami. At the present time, he is busily engaged in projects located in Nicaragua and Hong Kong.

First licensed as an architect in his home state of Illinois, Lee now holds a Senior Certificate of the National Council of Architectural Registration Boards. His theatrical design achievements won international recognition when the Royal Institute of British Architects entered his works in a permanent exhibit.

In 1927, Lee married Miriam Aisenstein of New York, and the couple have one daughter, Constance, now Mrs. George E. Keiter. In addition to being an extremely active family and businessman, Lee is also a charter member of the Los Angeles Variety Club, Tent 25, and belongs to the American Legion.

LEE AND HIS STURDY PLANE FORM AN EFFICIENT TRAVEL TEAM.





THE FOX WHILSHIRE, LOS ANGELES, DESIGNATED BY A SIGN TOWER IS NEATLY INCORPORATED INTO A MULTI-PURPOSE BUILDING.

Theatres Through the Years

Although S. Charles Lee has been continuously engaged in the practice of general architecture since 1922 and has designed all types of buildings for every conceivable purpose, many of his most notable works have been in the field of theatre design. Lee has specialized in this phase of architecture and outstanding examples of his achievements are featured on this and following pages. The photographs selected for presentation have been carefully chosen on the basis of the extent to which they demonstrate Lee's unique ability to dub a particular theatre with a theatrical flair and with a mark of distinction peculiarly its own.

The list on the opposite page, compiled from Lee's office files, shows 145 theatres which have been designed and completed, plus 22 which were planned but not finished, during the past 23 years. It should be noted, however, that this is by no means a complete record of Lee's accomplishments in the theatre design field, for he has designed a number of houses (some of which are shown) not specifically mentioned in the list. Furthermore, Lee has had a hand in the design of numerous remodeling projects not contained in the accompanying list. All in all, although only a total of 167 theatres is noted here, Lee has played an active role in approximately 300 theatre projects in many states and several foreign lands.

167 *THEATRES IN 23 YEARS

*Records incomplete. Actual total including remodeling is nearly 300.

BUILT:

Tower, Los Angeles, Calif.	1926
Fox, Bakersfield, Calif.	1929
Fox Wilshire, Los Angeles, Calif.	1929
Coliseum, San Francisco, Calif.	1930
Fox, Phoenix, Arizona	1930
Merced, Merced, Calif.	1930
Baywood, San Mateo, Calif.	1931
Fox Florence, Los Angeles, Calif.	1931
Los Angeles, Los Angeles, Calif.	1931
Studio, Hollywood, Calif.	1931
Sunkist, Pomona, Calif.	1931
Vogue, Hollywood 5, Calif.	1933
Westlake, Los Angeles, Calif.	1933
Alvarado, Los Angeles, Calif.	1936
Anaheim One, Anaheim, Calif.	1936
Anaheim Two, Anaheim, Calif.	1936
Anselmo, San Anselmo, Calif.	1936
Berkeley, Berkeley, Calif.	1936
Beverly, Beverly Hills, Calif.	1936
Clarkdale, Clarkdale, Arizona	1936
Colonial, Los Angeles, Calif.	1936
El Capitan, San Francisco, Calif.	1936
Eureka, Eureka, Calif.	1936
Grand Lake, Grand Lake, Calif.	1936
Hermosa, Hermosa Beach, Calif.	1936
New Bakersfield, Bakersfield, Calif.	1936
Oraville, Oraville, Calif.	1936
Porter, Woodland, Calif.	1936
Quincy, Quincy, Calif.	1936
Raphael, San Raphael, Calif.	1936
San Marino, San Marino, Calif.	1936
Senator, Sacramento, Calif.	1936
Sonora, Sonora, Calif.	1936
State, Woodland, Calif.	1936
Stockton, Stockton, Calif.	1936
Strand, San Francisco, Calif.	1936
Tower, Compton, Calif.	1936
Ventura, Ventura, Calif.	1936
Vogue, Alameda, Calif.	1936
Bell, Bell, Calif.	1937
Bruin, Westwood, Calif.	1937
Mission, San Francisco, Calif.	1937
Richmond, Richmond, Calif.	1937
Tamalpais, San Francisco, Calif.	1937
Alhambra, Alhambra, Calif.	1938
Allena, Los Angeles, Calif.	1938
Delano, Delano, Calif.	1938
El Monte, El Monte, Calif.	1938
Garvey, El Monte, Calif.	1938
Gentry, Compton, Calif.	1938
La Reina, Van Nuys, Calif.	1938
Loew's State, Los Angeles, Calif.	1938
Lyceum, San Francisco, Calif.	1938
Reinhardt, Los Angeles, Calif.	1938
Ritz, Inglewood, Calif.	1938
Selma, Selma, Calif.	1938
Tower, Fresno, Calif.	1938
Tujunga, Tujunga, Calif.	1938
Tumbleweed, Five Points, Calif.	1938
Vogue, South Gate, Calif.	1938
Academy, Inglewood, Calif.	1939
Admiral, Hollywood, Calif.	1939
De Anza, Riverside, Calif.	1939
Disney, Los Angeles, Calif.	1939
Encino, Encino, Calif.	1939
Grand, San Francisco, Calif.	1939
Hopkins, Oakland, Calif.	1939
Mayfair, Ventura, Calif.	1939
Rivoli, Van Nuys, Calif.	1939
RKO, Los Angeles, Calif.	1939
Rosemead, Rosemead, Calif.	1939
Roxie, Los Angeles, Calif.	1939
State, Modesto, Calif.	1939
Tower, Santa Rosa, Calif.	1939
Valley, North Hollywood, Calif.	1939
Venice, Venice, Calif.	1939
Wasco, Wasco, Calif.	1939
Bundy, Los Angeles, Calif.	1940
Dinuba, Dinuba, Calif.	1940
Santa Maria, Santa Maria, Calif.	1940
Temple, Temple City, Calif.	1940
Vern, Los Angeles, Calif.	1940

CONTINUED







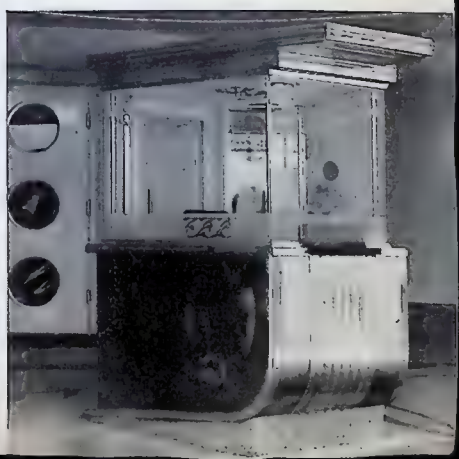


SEVERAL OF LEE'S OLDER THEATRES are shown here. ABOVE: Left—The front and lobby of the Los Angeles (1931), Los Angeles. Right—The front and lobby of the De Anza (1939), Riverside, Calif. BELOW: Top left—The lobby of the Vogue (1933), Hollywood, Calif. Lower left—The mezzanine staircase of the Fox Bakersfield (1929), Bakersfield, Calif. Top right—The lobby of the Fox Phoenix (1930), Phoenix, Ariz. Lower right—The boxoffice of the Vern (1940), Los Angeles.



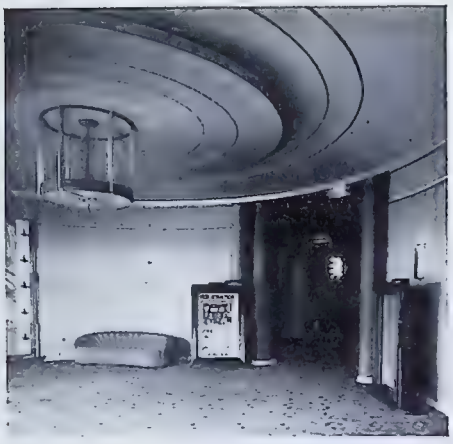












OTHER LEE THEATRES BUILT DURING THE 1930's. ABOVE: Top—Front of the Fox Florence (1931), Los Angeles. Bottom left—Auditorium of the Mayfair (1939), Ventura, Calif. Bottom right—Lobby of the Gentry (1938), Compton, Calif. **BELOW:** Upper left—A lounge in the Tower (1936), Compton, Calif. Upper right—Front of the Rosemead (1939), Rosemead, Calif. Bottom left—Front of the Tujuna (1938), Tujuna, Calif. Bottom right—Auditorium of the Hopkins (1939), Oakland, Calif.









Adams, Los Angeles, Calif.	1941
Alex, Glendale, Calif.	1941
American, Newhall, Calif.	1941
Arcade, Los Angeles, Calif.	1941
California, Glendale, Calif.	1941
California, San Diego, Calif.	1941
Capital, Glendale, Calif.	1941
Carlos, San Carlos, Calif.	1941
Egyptian, Hollywood, Calif.	1941
Glendale, Glendale, Calif.	1941
Mission, Pacific Beach, Calif.	1941
Pantages, Hollywood, Calif.	1941
Ramona, Los Angeles, Calif.	1941
Sacramento, Sacramento, Calif.	1941
San Jose, San Jose, Calif.	1941
San Pablo, San Pablo, Calif.	1941
Santa Ana, Santa Ana, Calif.	1941
Santa Cruz, Santa Cruz, Calif.	1941
State, San Diego, Calif.	1941
Windsor Hills, Los Angeles, Calif.	1941
Arcadia, Arcadia, Calif.	1942
California, San Diego, Calif.	1942
Fremont, San Luis Obispo, Calif.	1942
Lido, Mexico City, Mexico	1942
Linda Vista, Mexico City, Mexico	1942
Long Beach One, Long Beach, Mexico	1942
Mayfair, New York, N. Y.	1942
Oakland Newsreel, Oakland, Calif.	1942
Chapultepec, Mexico City, Mexico	1943
Crenshaw, Los Angeles, Calif.	1943
De Cuba, Mexico City, Mexico	1943
Huntridge, Las Vegas, Nev.	1943
Imperial, Los Angeles, Calif.	1943
Mexico, Mexico City, Mexico	1943
San Diego Drive-In, San Diego, Cal.	1943
Big Bear, Big Bear, Calif.	1944
Cottonwood, Cottonwood, Arizona	1944
Lakewood, Lakewood Village, Calif.	1945
Perris, Perris, Calif.	1945
Balboa, San Diego, Calif.	1946
Central, Los Angeles, Calif.	1946
Long Beach Two, Long Beach, Calif.	1946
Pico, Los Angeles, Calif.	1946
Arden, Lynwood, Calif.	1947
Chino, Chino, Calif.	1947
Miami, Miami, Florida	1947
Avo, Vista, Calif.	1948
Burbank, Burbank, Calif.	1948
Grand, Visalia, Calif.	1948
Harper, Fontana, Calif.	1948
Helix, La Mesa, Calif.	1948
Holly, Los Angeles, Calif.	1948
Lazarus, Los Angeles County, Calif.	1948
Puente, Puente, Calif.	1948
Reseda, Reseda, Calif.	1948
Sunset, Los Angeles, Calif.	1948
Bay, Pacific Palisades, Calif.	1949
Cameo, Los Angeles, Calif.	1949
Edwards Drive-In, Los Angeles County, Calif.	1949
La Tijera, Los Angeles, Calif.	1949
Marcal, Hollywood, Calif.	1949
Palm, Palmdale, Calif.	1949
Visalia, Visalia, Calif.	1949

PLANNED:

Newman	1936
Randolph	1936
Steller	1936
Garman	1937
Dell	1938
Park	1938
Warner	1939
El Sereno	1940
Hawthorne	1940
Dixie Canyon	1941
Helena	1941
Gregory	1944
Newsview	1945
Nicaragua	1945
Cavern	1946
South Gate	1946
Calco	1947
Drive-In	1947
Patterson	1947
Valley Plaza	1947
Valley Village	1947
Whittier	1947
Oxnard	1948

Colorful Recent Theatres

THE PICWOOD, LOS ANGELES

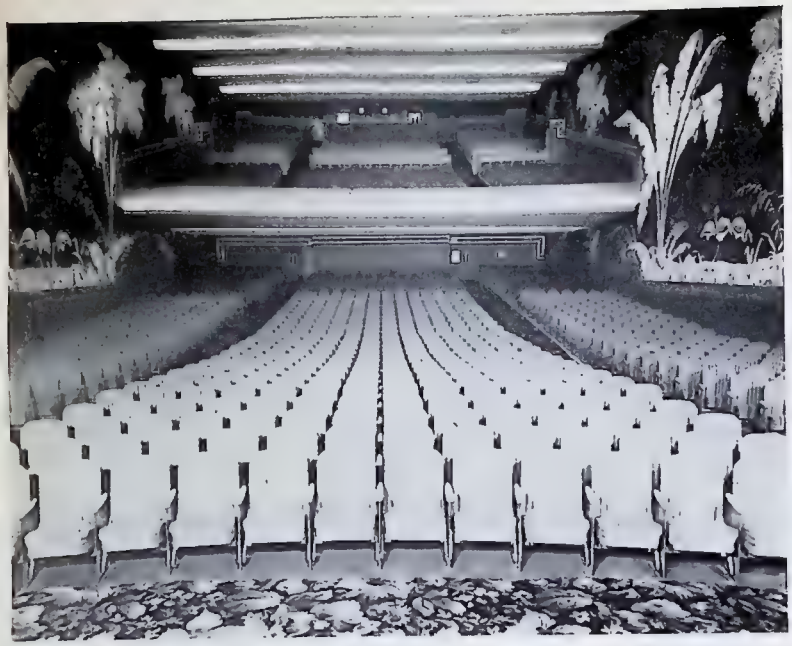
Although situated on one of the city's most heavily traveled broad boulevards, the Picwood has wisely been provided with ample parking facilities to accommodate the automobiles of both neighborhood and transient trade. Patrons of both classes are readily attracted to the theatre by its dominating front, on which neon lighting has been used to a more than generous extent. Ribbons of neon tubing flow gracefully up and down the front of a pylon on one side, while vertical neon stripes surface the huge paneled front on which the theatre's name has been traced in gigantic letters. The towering pylon and impressive name lettering are of such size that they seemingly dwarf the marquee and boxoffice.

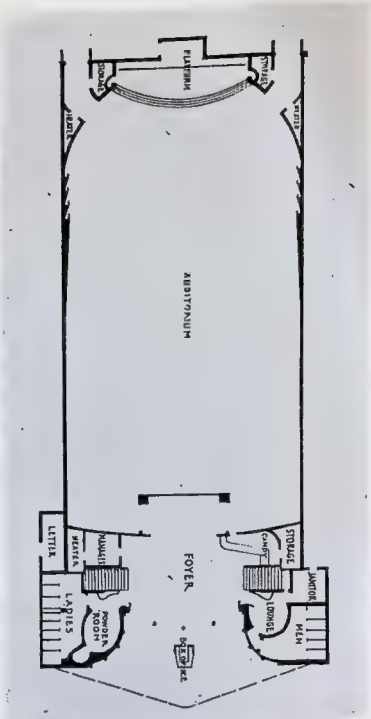
The conventional rectangular interior floor plan encompasses the acme in luxurious appointments within its boundaries. The ornate grandeur evident in the foyer and the adjoining lounges is carried on into the massively decorated 1,000-seat auditorium. Sight lines throughout the auditorium and the 500-seat balcony have been carefully studied to provide a good view from any angle, an objective attained in the very front of the theatre by a reverse floor slope. The tropical wall murals are highlighted by indirect lighting which emanates from troughs secreted in the stepped ceiling. Storage rooms have been provided on either side of the stage.



RIGHT: The foyer gives the entering patron an immediate and pervasive sense of luxurious magnificence with its rich carpeting and distinctive waffle dome ceiling. The candy stand has been so effectively spotlighted that it is practically impossible for him to overlook it. BELOW: A baroque tie-back effect has been accomplished with plaster in the front of the auditorium, which has a fully draped, open proscenium. Indirect lighting shows up the wall murals to good advantage as well as providing adequate illumination.







AN EVEN DIFFUSION OF LIGHTING throughout the auditorium, above, is provided by the indirect sources in the graduated ceiling. A floor plan, right, shows the compact arrangement of facilities. A front view in color, below, illustrates the striking combination of red and gray.





A COPPER DECORATED MURAL features the light trap above. Below—The floor plan. Right—Two front views showing the lofty sign tower.

THE LA TIJERA, LOS ANGELES

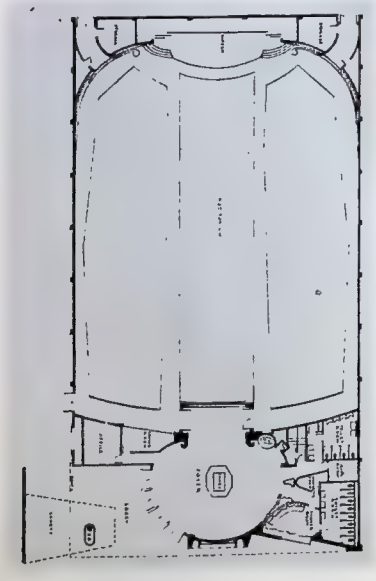
A 1,530-seat neighborhood house, the La Tijera opened January 12, 1949, in a middle class section of the city with a motion picture conscious drawing area population of approximately 86,000.

The general construction of the building is steel and gunnite concrete. The front of the theatre is red Roman brick with accenting Arizona flagstone, glass, and copper trim all strikingly blended.

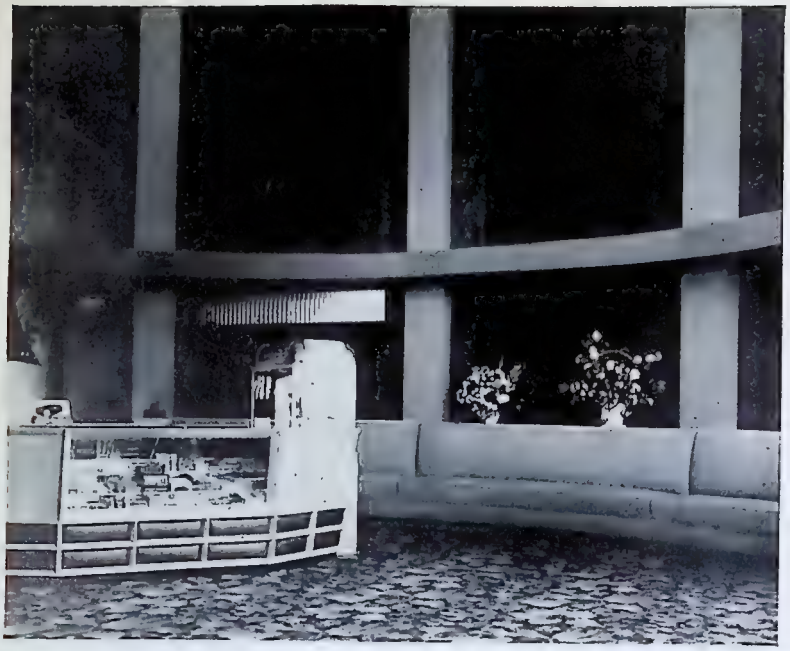
The house has been designed to combine the outside lobby and inner foyer to give the appearance of one unit. An entire glass partition forms the only dividing line between the two areas. An island concession stand is situated in the foyer, and around the walls are built-in plant areas. Circline lighting is carried through from the outside into the foyer.

The asbestos limpit walls of the beautiful auditorium are painted Kelly Green and accented in white and gold.





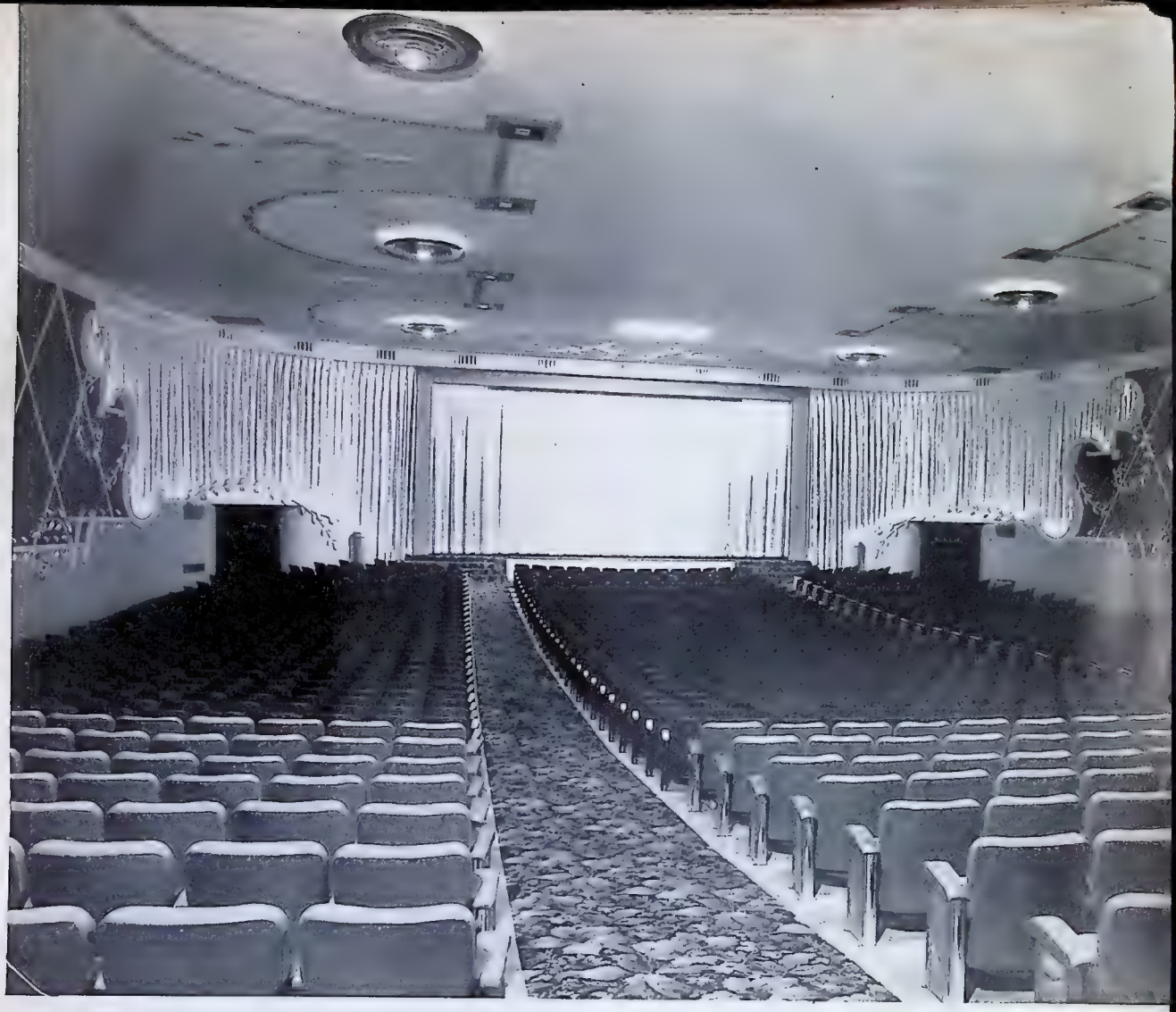




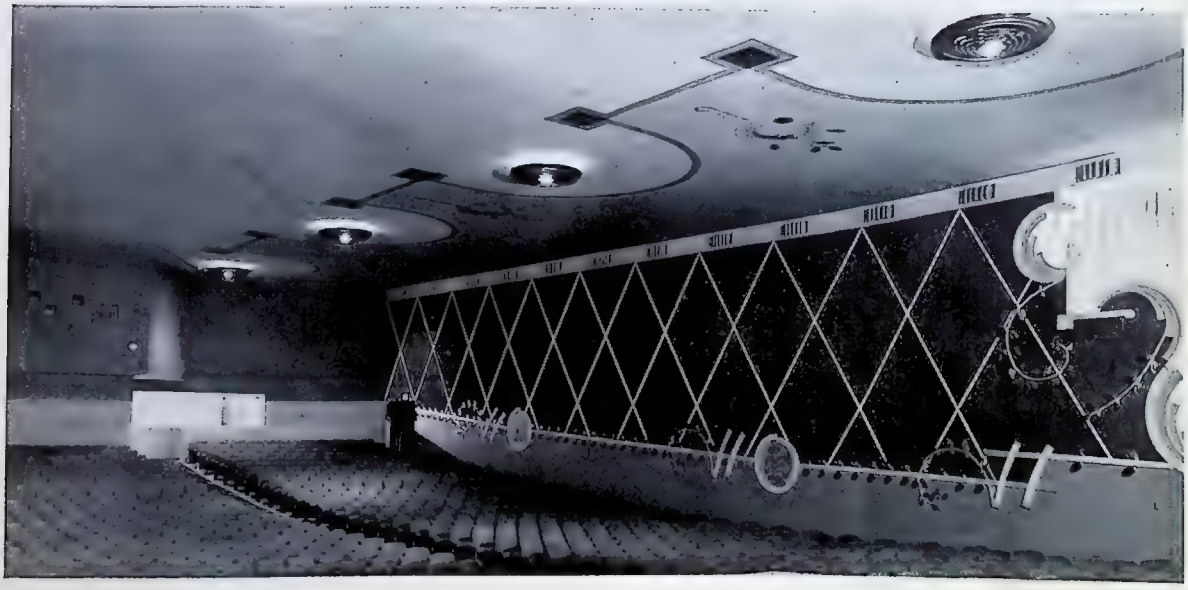


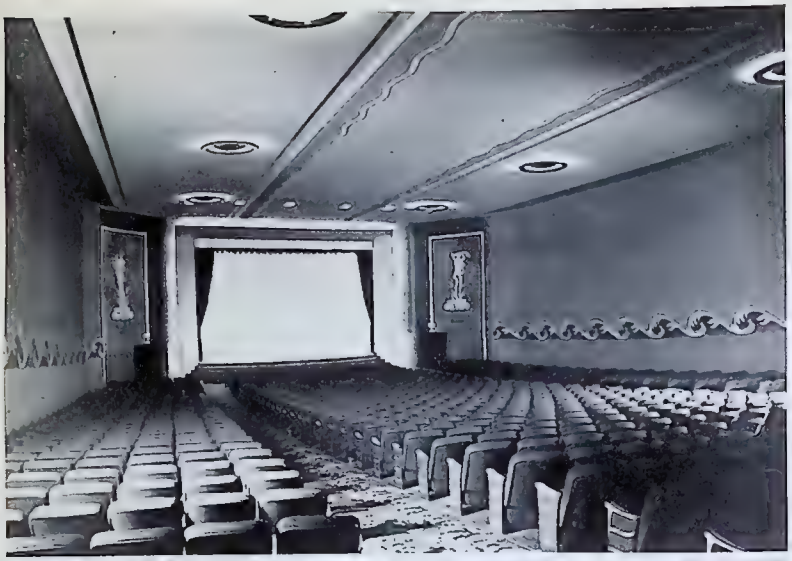
BUILT-IN WALL SEATS surround the candy stand in the left cut. Above—A night view of the front. Below—An auditorium shot shows the detail of cast plaster design on sides of proscenium and the indirectly lighted drapes.





THE ENTIRE FRONT OF THE AUDITORIUM, above, has been draped as a framing for the proscenium. Ceiling anemostats diffuse conditioned air throughout the interior and also serve to secret light sockets. Below is a green sidewall, decorated with lattice type plaster painted white for dramatic effect.





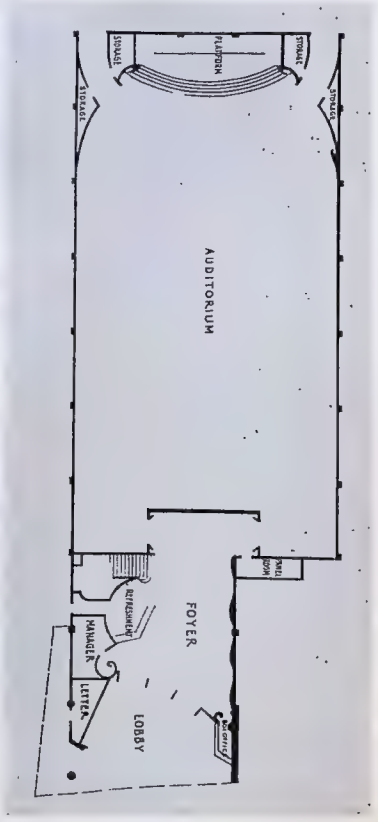








THE BAY boasts many exquisite appointments. Left—1. Auditorium. 2. Entrance to ladies' lounge. 3. Section of the lobby with candy stand. Above—1. Front. 2. Entrance to the lounge level. Below—Overall plan of first floor.





THE COLOR CAMERA BRINGS OUT THE FULL TONALITY OF THE BRIGHT HUES IN THE SEVERAL ELEMENTS OF THE MODERN FRONT.

THE BAY, PACIFIC PALISADES

Situated in an exclusive residential community, no stone has been left unturned to make the Bay a first-class picture house, both within and without. The conventional type of marquee and entrance have been done away with in favor of a roofed outer lobby, separated from the interior by a porcelain enamel wall with glass doors. An overhanging canopy protects patrons alighting from cars in bad weather while the driver proceeds to a 500-car adjoining parking lot invaluable in modern management.

The luxurious foyer has been embellished with lavish murals done in a tropical motif, and a modern candy bar has been covered in leather with gilt nailheads. Doors lead from either side of a dominating mural into the 1,000-seat auditorium. A stairway at one side of the candy stand leads up to the mezzanine floor, which includes the projection room, 80 loge seats, the ladies' powder room and gentlemen's smoking room.

The auditorium proper is done in soft rose tones with two murals on either side of the proscenium providing decorative accents to the ornamentation.





THE LINDA VISTA, MEXICO CITY

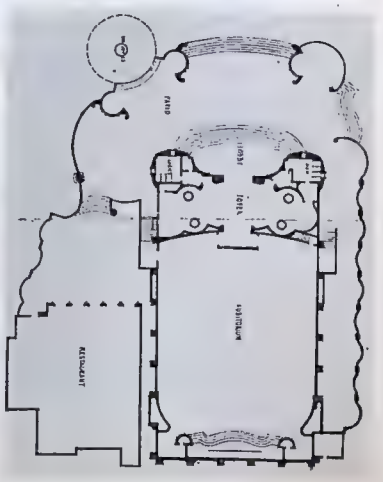
The design of this house is entirely in keeping with the refined character of the high-class residential district in which it is located. The most elegant traditions of Spanish architecture have been embodied in its every line to make it a distinguished showplace.

The building is set in a large compound well back from the street. Marked by a tall sign tower with a circular marquee in front, the theatre is trimmed with carved native gray stone. A series of architectural motifs are to be found on all sides. The roofs, as well as the masonry domes, are covered with Mexican tile. The compound includes a restaurant with an outdoor patio.

Carved wood figures, set against a background of leather and flanked by walls and ceiling of walnut, highlight the entrance to the auditorium from the foyer. The 1,400-seat auditorium is elaborately decorated with wall murals depicting various native Mexican dances. Black light is used to illuminate the murals, while neon lights furnish general illumination from ceiling sources. Fluorescent lighting has been provided in the aisles for the safety of entering and departing patrons. The entire interior is healthfully ventilated throughout and luxuriously comfortable.

ON THIS PAGE: Left—1. Front. 2. Patio. Below —1. Side. 2. Floor plan. OPPOSITE PAGE: Left —1. Auditorium Wall. 2. Corner facade. Right— 1. Foyer Wall. 2. Auditorium. Below—Foyer.

















BOTH THE FRONT AND AUDITORIUM EXHIBIT THE MAXIMUM EFFECT OBTAINABLE UNDER THE RESTRICTED WARTIME USE OF MATERIALS.

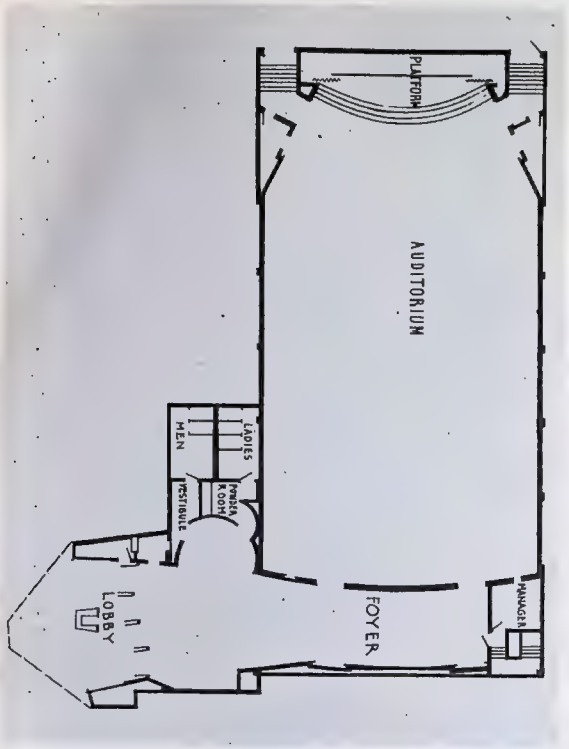


THE LAKEWOOD, LAKEWOOD VILLAGE

Due to the fact that it was built during wartime to serve the recreational needs of a rapidly growing community, no allowances could be made for "extras" in the design and construction of the Lakewood. Nonetheless, the very simplicity of the house has given it a gracious, homelike atmosphere.

Since it was originally anticipated that stores would be built on the street frontage along the outer auditorium wall, the auditorium was set back accordingly. The resulting unusually deep foyer has been given added spacious effect by an entire back-mirror wall. The right wall of the foyer has built-in seating for waiting patrons, and the left wall incorporates a drinking fountain surrounded by a Flexglas panel. The manager's office is situated at the extreme end, while rest-rooms are conveniently located at either side of the entrance to the foyer.

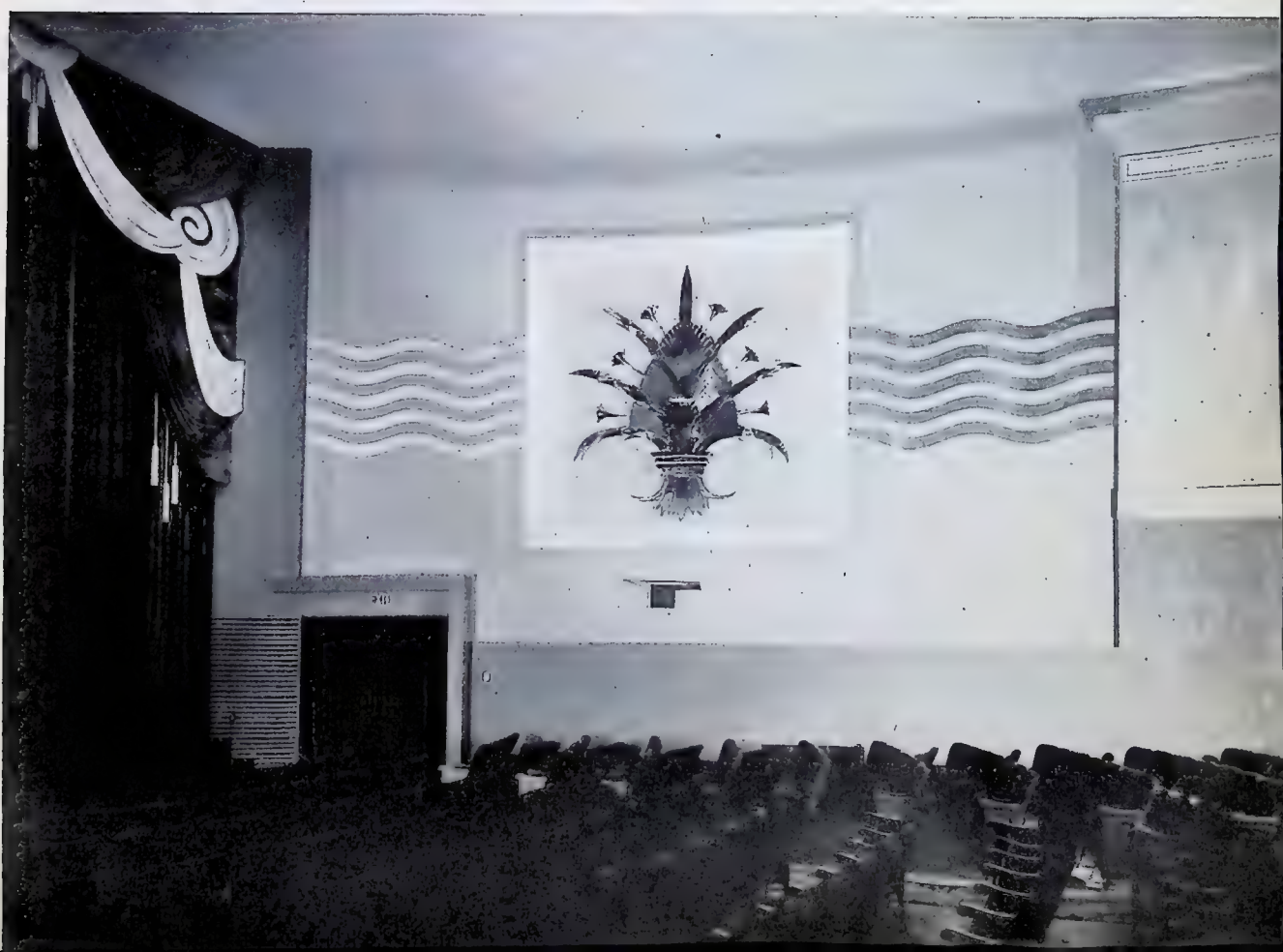
With the exception of two handsome mural-effect ornaments on each side of the proscenium, the decor of the auditorium is simple in keeping with the theme of the entire house. These murals are especially entrancing because their burnished metalic surfaces glow with varied colored lighting effects.







A NUMBER OF ELEMENTS, FROM THE RICH CARPETING TO STRIPED SETTEES, RELIEVE THE ENFORCED SIMPLICITY OF THE INTERIOR.



In Contemporary Non-Theatrical Fields

While many of Architect Lee's most notable achievements have been in the field of motion picture theatre design, he has by no means confined his activities to this sphere alone. Although the design problems of theatremen have always afforded Lee particularly choice objectives on which to expend his innate creative abilities, his drawing boards have always remained at the disposal of builders desirous of erecting structures for a host of other purposes. In order to gain a fuller understanding of Lee's works as an entity, several examples of his accomplishments in contemporary, non-theatrical fields have been selected for brief discussion and pictorial presentation in this survey of his abilities.

The photograph directly below shows a district office building of the Los Angeles Power and Light Department. In a shrewd effort to capitalize on the unlimited light sources available to this municipal public utility, Lee designed the building with a solid front of structural glass. When illuminated at night, this facade is bathed in a striking decorative glow that singles it out.

Featuring a statuesque sign tower with revolving bowling balls lighted by neon, the Tower Bowl (top left, opposite page), San Diego, Calif., houses an elaborate cocktail room, billiard room, luncheonette, fountain, offices, and 28 bowling alleys. Its front is distinctly theatrical in effect.

Representing the acme in a design for modern living, the Du Barry Apartments (center left, opposite page) are situated in a fine residential district of Los Angeles. Directly below, the streamlined Green & Hinkle store with its panoramic glass windows is shown in the fashionable Beverly Hills section of Los Angeles. The modern architectural planes predominate.

The M.P.A. office building shown at the right top of the opposite page is followed by a view of the magnificent factory and adjoining beauty salons which Lee designed for Max Factor, world-renowned Hollywood cosmetics manufacturer.

Designed with an eye to the nautical and facing a large swimming pool, the third illustration on the right of the opposite page shows the unique building of the Desert Club, while the bottom photo depicts a factory building which is both beautiful and functional at the same time.

Although all of the projects shown here are non-theatrical in nature, they embody some design features akin to those used by Lee in his theatres—large areas of glass, broken lines, etc.

FAMILIAR CHARACTERISTICS OF LEE'S DESIGN TECHNIQUES MAY BE NOTED IN THESE EXAMPLES OF OTHER TYPES OF STRUCTURES.

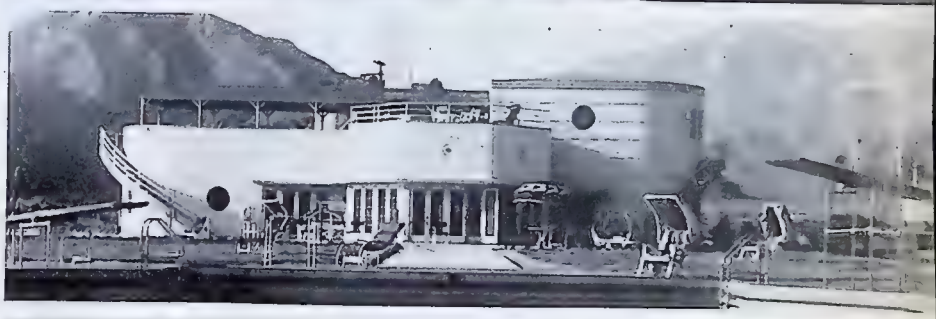



ENTERTAINMENT NIGHTLY
"MARINE" BLUE GLAMOUR GIRL
"TOM" "SUE"
MUSICAL INTERLUDES










GREENE & HINKLE
Greene & Hinkle


HOUSTON

Theatre Design Features

SHOWMANSHIP:

Amid the array of elements which constitute good "showmanship," certainly the original design of the theatre stands out as a fundamental one. While a gorgeous theatre alone will not attract patrons to see the film fare offered, a well-designed and appointed house is a powerful added inducement to the citizen seeking entertainment and relaxation. Since no theatre can expect to be able to show topnotch product every day in the week, a house which is appealing both inside and out will serve to bolster boxoffice receipts at those times when good film fare is simply not available, as well as improving business still further during periods when first-class pictures are playing to crowded houses that tax normal facilities.

Since a theatre, like people and other things, is judged first of all on its external appearance, showmanship begins right at the front. A handsome showplace face may be moulded out of numerous components—a picturesque sign tower, a graceful marquee, areas of sheer glass, striking poster cases, a magnetic boxoffice, etc. The way in which such diverse elements are blended into a unified whole "makes" or "breaks" a theatre front. A number of ways in which Architect Lee approaches this problem are presented below.

The correct and effective use of lighting is one of the most important factors in drawing the attention of the passerby to the front of the theatre as a whole. Light and entertainment form a natural mental association, as particularly exemplified by the plethora of lights along New York's Gay White Way. Therefore, the theatre which successfully exploits light on the exterior of its building has a far better chance of attracting patrons than does one which has a dark and unappealing front that suggests a drab and unexciting show.

A definite transition is taking place, however, in the handling of light on the exterior of a building. The bulb treatment of yesteryear and jumping neon are steadily being streamlined in an all-out effort to adapt lighting to new forms or artistic designs. When motion is used in a display, it is now considered good practice to integrate it to a greater extent into the building or its theme than was formerly possible in the early days of neon adaptation. One long-standing method of light accentuation, floodlighting, is still being used extensively with its customary effectiveness and should be retained as a valuable tool in drawing attention to a building exterior.

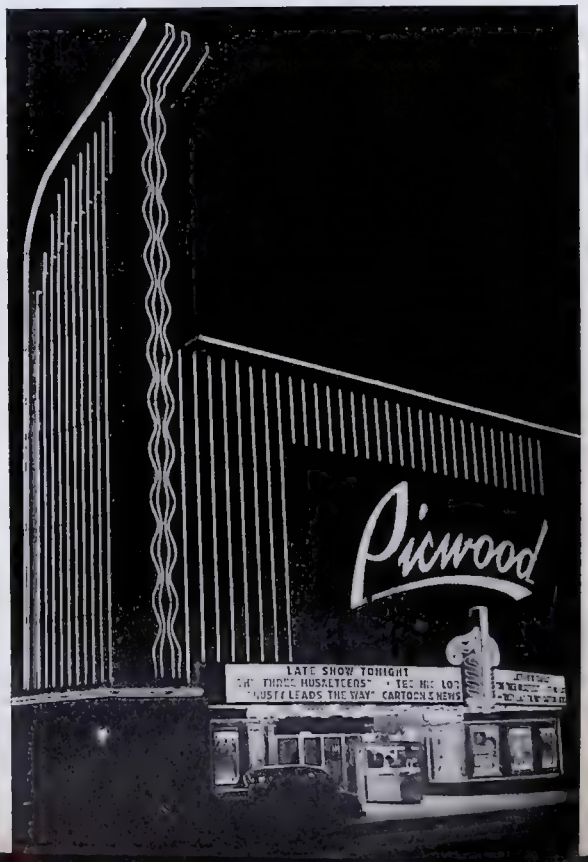
The Tower, Fresno, Calif., and the Picwood, Los Angeles, are good examples of theatres whose fronts are bound to attract notice both from nearby and afar. The fiery ball topping the sign tower of the former is clearly visible for a distance of nearly ten miles, and thus attracts the eyes of distant prospective patrons as well as those close by. While the pylon of the Picwood is not quite as lofty, its vertical neon stripes and flutings are visible many streets away.

Since the La Reina, Van Nuys, Calif., and the Arden, Lynwood, Calif., are both situated on main thoroughfares with dozens of surrounding business establishments endeavoring to attract attention with brilliant signs and floodlights, it was necessary to give the fronts of these houses particularly effective light treatments. This consideration accounts for the total blaze of light which marks the front of La Reina to endow it with a forceful "pull." The movement of line, clearly apparent in the manner in which the marquee completes the architectural motivation behind it and then joins the broad deep vestibule in a direct tangent toward the boxoffice and entrance, is prominently played up by the dynamic use of light.

The Arden stands out among neighboring buildings not only because of its attractive front and graceful marquee, but also by the word "Arden" flashing at intervals on the sign tower in different colors, so that it may be seen clearly from a considerable distance up and down the street.

Designed to meet the entertainment needs of a small subsistence project community, the Tumbleweed, Five Points, Calif., furnishes a good example of clever showmanship because the structure has been built in keeping with the character of the locale. The building itself, constructed along the





lines of a barn, has been appropriately endowed with a barnyard in front containing realistic cast plaster ducks, a wishing well, and an old oaken bucket. A windmill (operated by an electric motor) sign tower, wagon wheels, and a simple marquee fill out the pattern of a front that is effectively pointed up by character lighting.

The poster case is a vital selling element in the theatre front whose importance cannot be disregarded. In spite of the other media through which a picture is advertised and sold, the poster case inevitably persuades a certain percentage of patrons to lay their money on the boxoffice counter. It is imperative, therefore, that poster cases be designed in an interesting fashion and so placed in relation to the theatre building that they will exercise maximum selling power at all times. In recognition of the fact that excessive similarity among poster cases will cause reductions in their merchandising abilities, Architect Lee, for example, has lately designed some cases with a double color of neon, one inside lights the display attractions, while another color on an outer rim makes an attractive lighted frame.

A BLAZING BALL TOPS THE REGAL SIGN TOWER of the Tower, Fresno, Calif., at the left of the opposite page, while beside it the "neonized" front of the Picwood, Los Angeles, glows in the darkness. The fronts of the La Reina, Van Nuys, Calif., and the Arden, Lynwood, Calif., sparkle on the right of this page. Below and at the bottom, are both aerial and front views of the uniquely rustic Tumbleweed, Five Points, Calif.

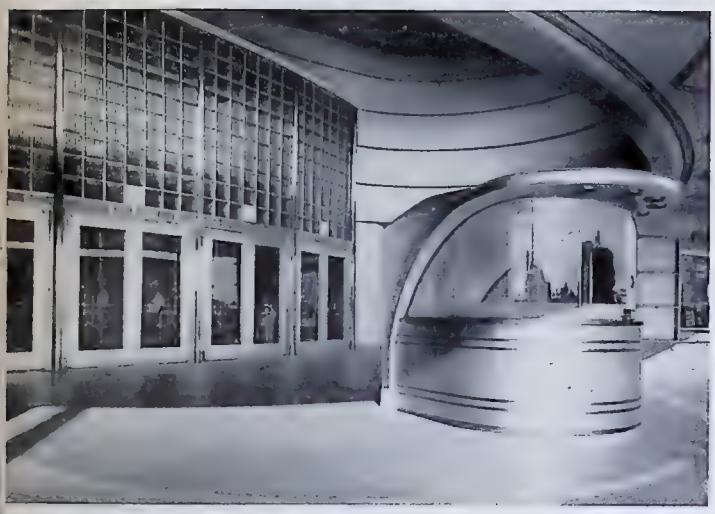




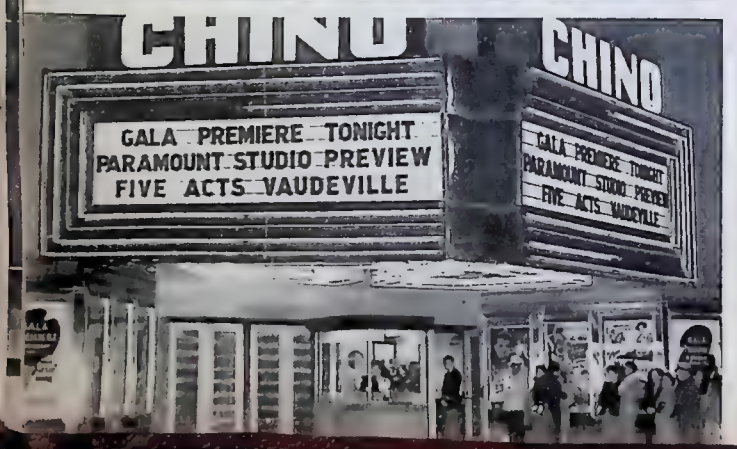


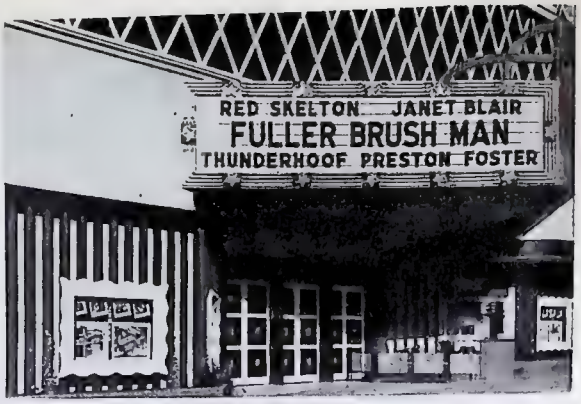












A QUINTESSENCE OF GOOD SHOWMANSHIP is exhibited in the design of the four theatres shown on the left. 1. Unified poster case display in lobby of the Vogue, South Gate, Calif. 2. Modernistic boxoffice at the Academy, Inglewood, Calif. 3. Front of the Reseda, Reseda, Calif. 4. Front of the Chino, Chino, Calif. Above—Front of the Helix, La Mesa, Calif. Below—Exterior of the Harper, Fontana, Calif., is a new theatre concept.

Other ways in which poster cases may be used to best advantage are apparent in the accompanying photographs of the Tower, Fresno, Calif., and the Vogue, Southgate, Calif. Cases beckoning patrons to the former have been so staggered that they are all legible from the street, while those of the latter can be trimmed together to create a continuing store window display effect.

Some years ago it was standard practice to build boxoffices right into the sides of buildings in a more or less obscure fashion. As showmen gradually came to appreciate more and more the value of the boxoffice as an attention-getter, it was moved onto the sidewalk and dressed up with the cashier in full view. Although today there is an increasing tendency to restore the boxoffice to the side of the building again, it is not being tucked away almost out of sight as it was formerly. The girl is kept in plain view to indicate that the boxoffice is open for business, and greater efforts are being made to embellish it with magnetic appeal.

The island-type boxoffice of the Academy, Inglewood, Calif., is one which exemplifies the best traditions of modern showmanship with its streamlined stainless steel and bronze construction. The enclosure of glass adds to its sheer beauty of form and places the entire front within view of the cashier.

The boxoffices at the Chino, Chino, Calif., and the Reseda, Calif., have been designed to form an integral part of the whole front. This twist in showmanship has been successfully achieved by planning size, location, and decorative treatment to combine most effectively toward this end.

Although the boxoffice of the Helix, La Mesa, Calif., has been incorporated into the side of the building, it remains prominently in view. The unique turnstile arrangement, built in conjunction with the boxoffice, is a shrewd companion device in that it enables a single person to handle the selling of tickets, counting of admissions, and admittance to the theatre when such a grouping of operations is desired.

The Harper, Fontana, Calif., also features a sidewall boxoffice with prominence given to the ticket booth itself, and ample lobby space has been left available in a relatively small entrance area. This arrangement is still another way in which the boxoffice may fit into a good scheme of showmanship.



EFFECTIVE LIGHTING:

Light, aside from its natural functions of providing illumination for patron safety and visibility for operation at night, is a potent selling adjunct to any theatre, whether it is used inside or out. Correctly applied, decorative lighting effects may so embellish all portions of the buildings as to minimize the need for other ornamental appointments. Skillful lighting arrangements in the marquee and in the auditorium, for example, aid in creating a festive spirit that is in keeping with the building's nature as a place of entertainment.

The State, San Diego, Calif., is an excellent example of a theatre to which lighting has been cleverly adapted. A spire, which rises 125 feet in the air and is visible from a distance of five miles, flashes an ever-changing ribbon of harmonized colors through the use of hundreds of flasher contacts. This bright point of attraction is admirably complemented by an unusually large marquee which uses 946 letters in 64,050 square feet of illuminated neon area. The external green and white vari-colored surface has neon tubing that lights each plane of the building buried within its facing.

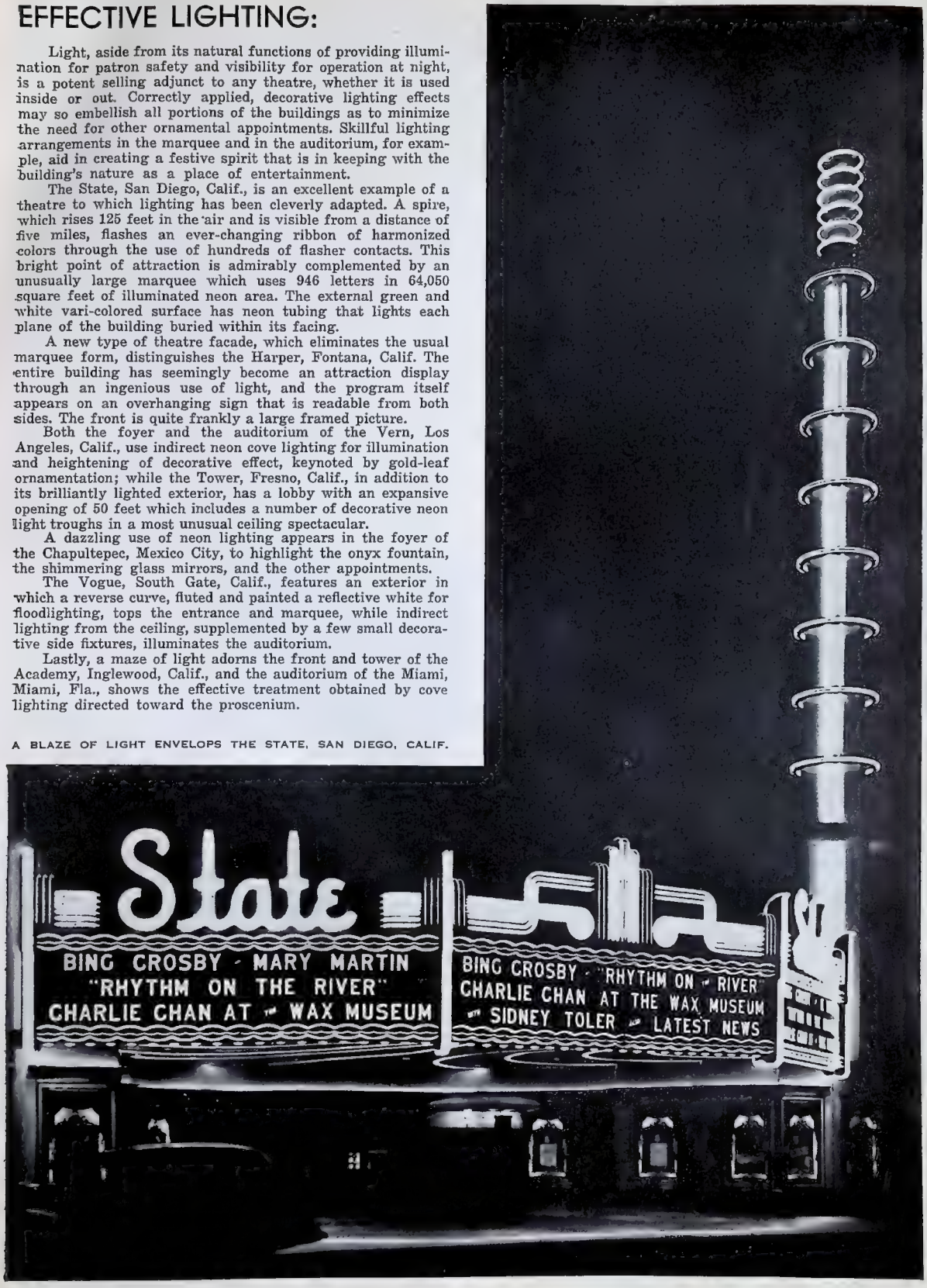
A new type of theatre facade, which eliminates the usual marquee form, distinguishes the Harper, Fontana, Calif. The entire building has seemingly become an attraction display through an ingenious use of light, and the program itself appears on an overhanging sign that is readable from both sides. The front is quite frankly a large framed picture.

Both the foyer and the auditorium of the Vern, Los Angeles, Calif., use indirect neon cove lighting for illumination and heightening of decorative effect, keynoted by gold-leaf ornamentation; while the Tower, Fresno, Calif., in addition to its brilliantly lighted exterior, has a lobby with an expansive opening of 50 feet which includes a number of decorative neon light troughs in a most unusual ceiling spectacular.

A dazzling use of neon lighting appears in the foyer of the Chapultepec, Mexico City, to highlight the onyx fountain, the shimmering glass mirrors, and the other appointments.

The Vogue, South Gate, Calif., features an exterior in which a reverse curve, fluted and painted a reflective white for floodlighting, tops the entrance and marquee, while indirect lighting from the ceiling, supplemented by a few small decorative side fixtures, illuminates the auditorium.

Lastly, a maze of light adorns the front and tower of the Academy, Inglewood, Calif., and the auditorium of the Miami, Miami, Fla., shows the effective treatment obtained by cove lighting directed toward the proscenium.

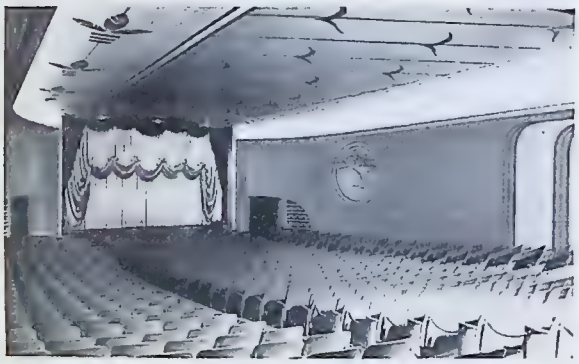


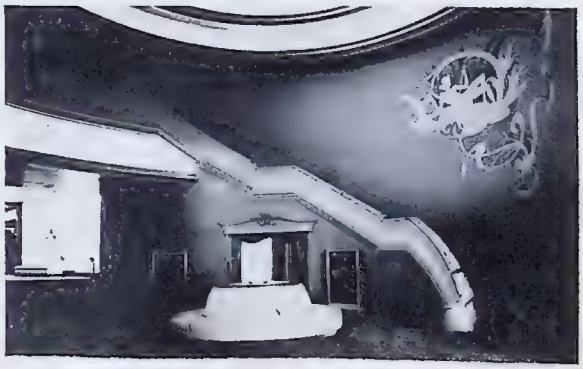
A BLAZE OF LIGHT ENVELOPS THE STATE, SAN DIEGO, CALIF.



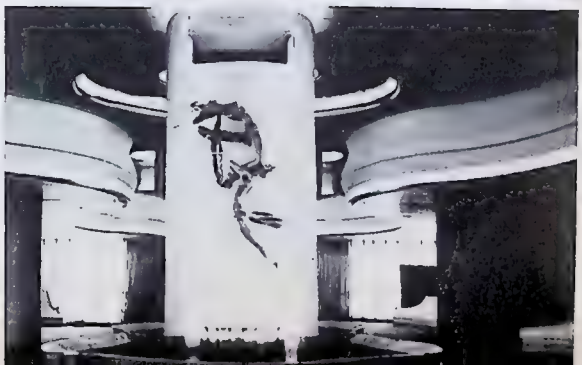
THE UNORTHODOX FRONT OF THE HARPER, FONTANA, CALIF., IS FURTHER ACCENTUATED BY THE USE OF DRAMATIC LIGHTING EFFECTS.

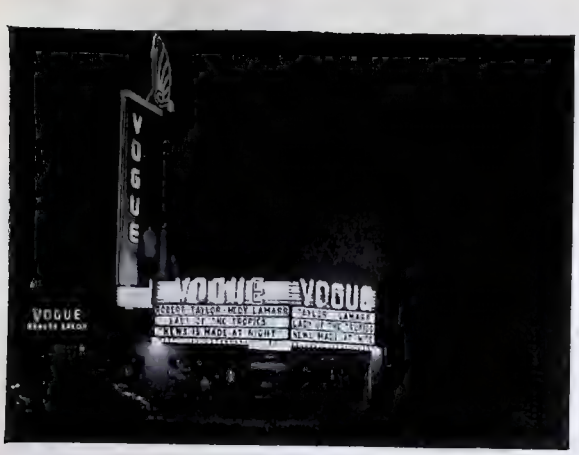
MELLIFLUENT RAYS OF INDIRECT LIGHTING lend a comforting warmth to the auditorium and foyer of the Vern, Los Angeles, Calif., shown in the two photographs to the left, below, and bring out the full lustre of the gold-leaf ornamentation. On the right, light again proves a magical agent in setting off the charm of the onyx fountain, the back-wall mirror, and the staircase in the foyer of the Chapultepec, Mexico City.



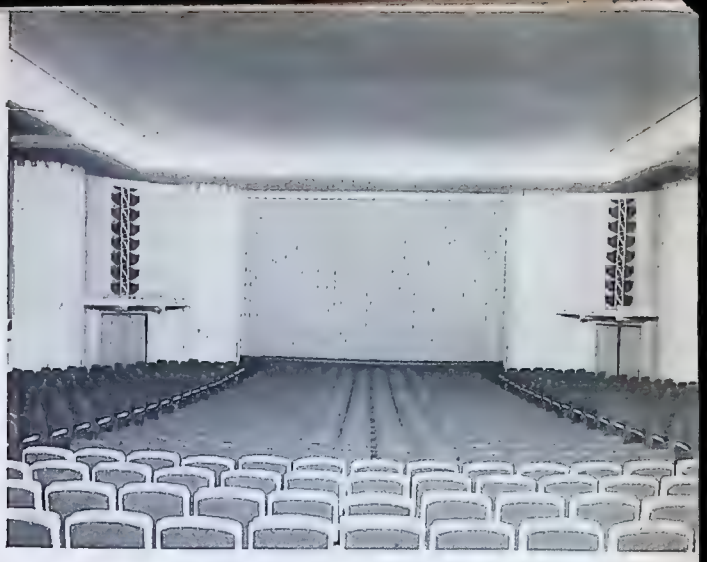




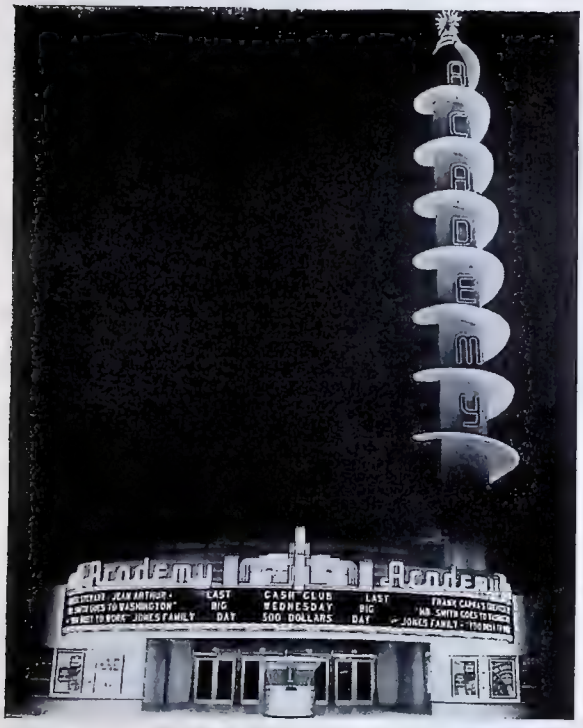




IN BOLD DEFIANCE OF THE SURROUNDING DARKNESS, the front of the Vogue, South Gate, Calif., above, beckons patrons, while soft indirect lighting plays over the auditorium. Below, the stately tower of the Academy,

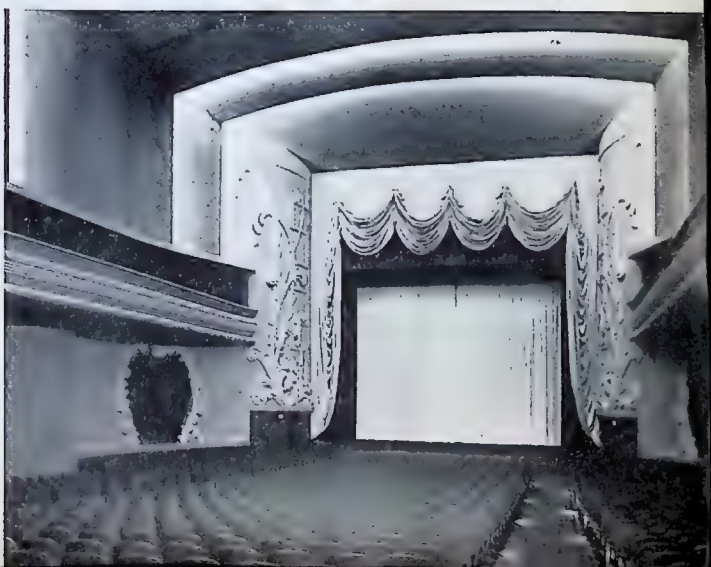


Inglewood, Calif., spirals skyward in a fantasy of light. At the bottom, light glows over a drink bar in the Miami, Miami, Fla., while auditorium cove lighting is directed toward the proscenium.











A PORTE-COCHERE ENTRANCE TO THE PARKING AREA IS A NOTEWORTHY DESIGN FEATURE OF THE ARDEN, SOUTH GATE, CALIF.

THE AUTOMOBILE:

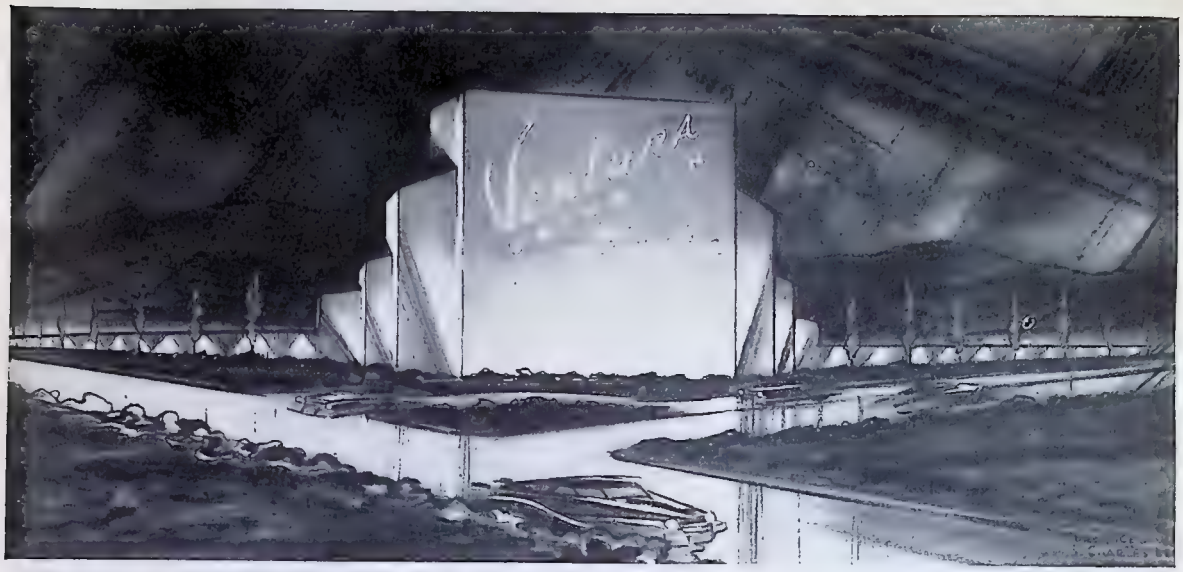
In emulation of the steam engine and other revolutionary inventions, the automobile has exercised far-reaching effects on the pattern of civilization in every sphere of human endeavor. The theatre field has not escaped the inevitable parking problems created by the ever-swelling tide of automobiles, and houses built in heavily congested downtown areas are experiencing a decided falling off in boxoffice receipts because of the lack of nearby parking space. The inevitable result has been a trend toward erecting more and more theatres in localities where ample parking facilities are available.

Aside from the phenomenal growth in population which it has undergone in recent years, the West Coast was one of the first areas to recognize the importance of large parking spaces because its public transit systems have not kept pace with its progress. Therefore, it is reasonable to assume that an overwhelming percentage of theatre patrons arrive by automobiles, which must be parked somewhere. As a result, it has been necessary to provide large parking areas in conjunction with theatres as a realistic facet of profitable operation.

In order to integrate such automobile parks with the houses themselves, Architect Lee has designed a number of theatres with the park entrance located directly under the marquee, so that passengers may alight as close to the boxoffice as possible while the driver parks the car in the adjoining lot. The covering afforded by the marquee, or an additional canopy, is, of course, a great convenience factor in bad weather that can be worked into the theatre facade.

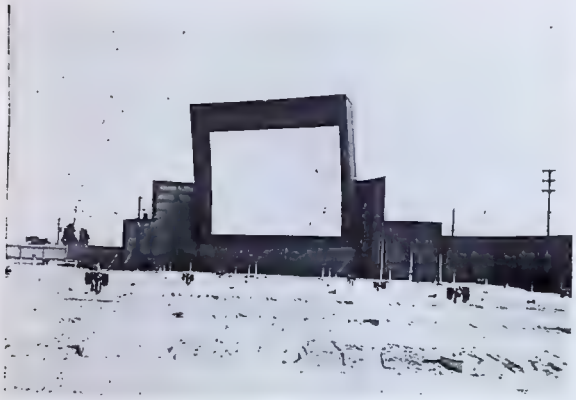
The illustrations of the Arden, South Gate, Calif., above, and the La Tijera, Los Angeles, right, show how successfully the parking phase of a theatre's operation may be unified with its other elements to form an integrated whole.

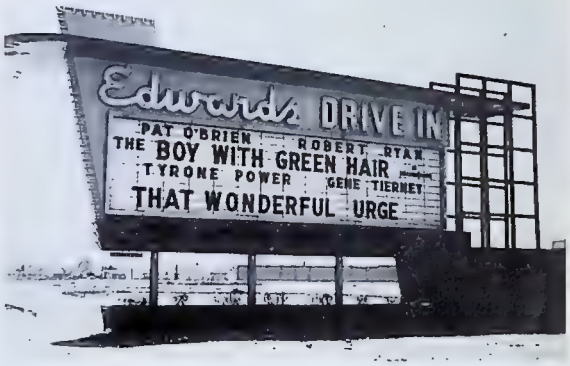




Just as the success of the neighborhood shopping center has been largely due to its fulfillment of the need for parking space, so the rapid growth of the drive-in theatre has resulted, to a considerable extent, from its ability to free moviegoers from parking worries as well as from "baby sitters."

Architect Lee, among the first to recognize this trend, was also one of the first West Coast architects to design a drive-in, such as the Edwards Drive-In, Los Angeles County.







THE LIGHT TRAP:

The mere opening of auditorium doors to admit or let out patrons has created three cardinal problems in motion picture exhibition. First of all, the light which streams in from the illuminated foyer, or even from the sunlight or automobile headlights in the street, whenever conventional doors are opened creates a bad "halo" effect on the screen. Originally, in the conversion of the theatre from flesh to film, it was necessary to hang drapes in or behind the standee area to alleviate this light disturbance. Later, an inner set of solid or heavily draped doors were added to film theatre design. Now, the desire for open, clear-vision, glass-enclosed lobbies has again brought this light flash problem to the fore.

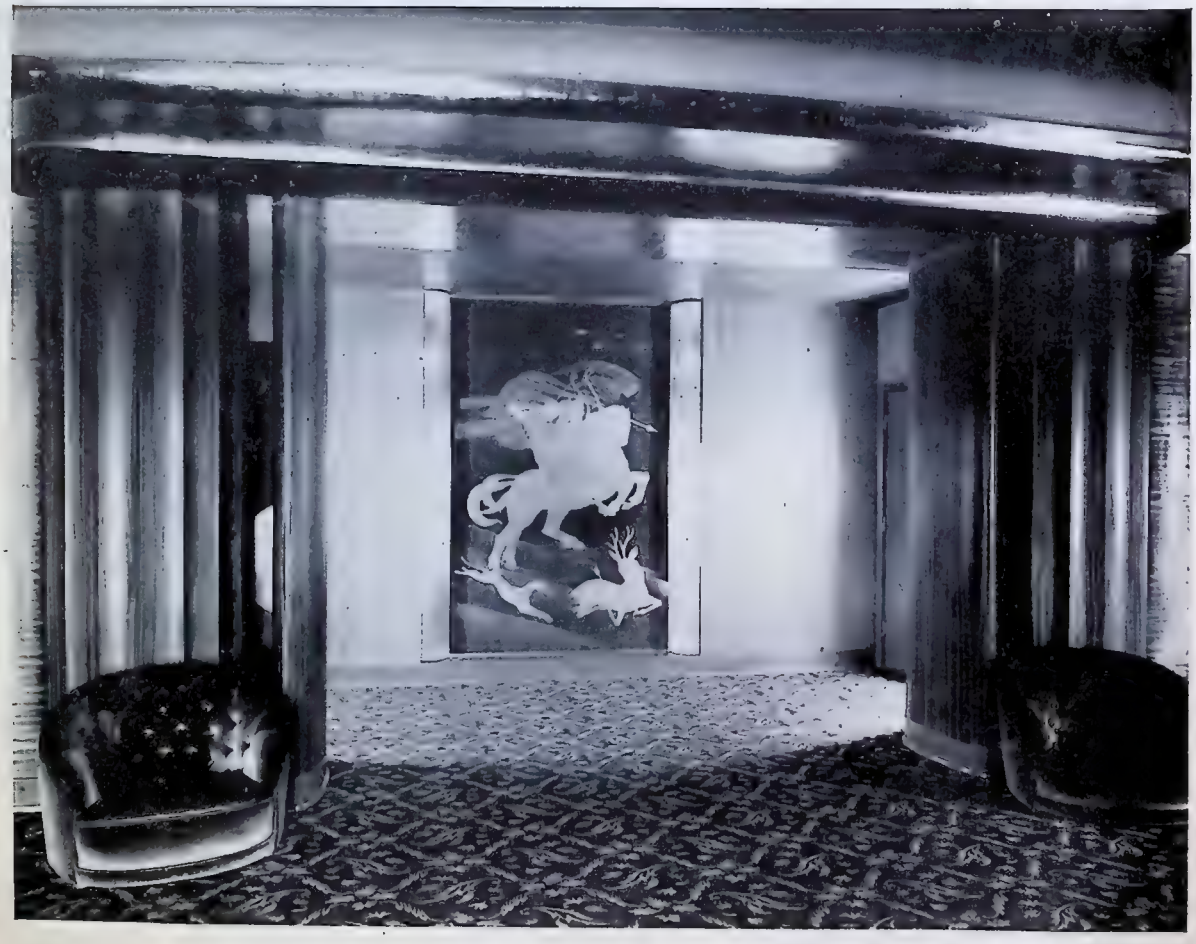
The second difficulty arises when the patron progresses from a brightly lighted foyer into the blinding darkness of the auditorium where it is impossible for him to orientate his vision immediately to his surroundings and to find a desired seat or even the area or aislehead of his choice.

Thirdly, the normal flow of traffic through the entrance doors is straight away into the center aisles, which are usually the first to be populated and, consequently, offer the fewest available seats. It is thus necessary to station an usher at the center aisle to direct traffic to the sides. This measure generally creates a buzz of conversation that it is annoying to both seated and entering patrons.

A panacea for these evils has been devised and employed by Architect Lee in the design of many of his theatres. This device, known as a "light trap," consists merely of a depressed entrance at the center axis of the foyer with doors at each side



AN EXQUISITELY CARVED GLASS MURAL, set in an aluminum frame, highlights the effective "light trap" in the foyer of the Tower, Fresno, Calif., as shown in the two illustrations on this page. The blue and gold ceiling, lighted with pink and white neon, is set off by the Gold Narra Wood walls, and the Black Walnut pilasters and columns.





THE GRACEFUL FOLDS OF A HEAVY DRAPERY surround the main entrance portal to the auditorium of the Academy, Inglewood, Calif., to aid in keeping out disturbing light. A peach-colored mirror flanks the sides.



THE VIBRANT GLASS MURAL AT THE REAR symbolizes the Arts of the Motion Picture and the Theatre. Within, a glass screen separates the rear cross-aisle from the main auditorium so available seats are visible.

opening into the auditorium at right angles instead of directly into the rear. Thus, a baffle is left between light in the foyer and the screen at all times.

As patrons enter through the "light trap," they are able to see for themselves whether or not seats are available in the center section. If so, they can double back through the standee area to the center rows of seats. If not, however, they are lead on a natural tangent by the "light trap" type of entrance directly to the side aisles. In addition to these advantages, the "light trap" provides a lobby focal point for decorative themes.

THE TASTEFULLY DECORATED FOYER of the Lido, Mexico City, includes a depressed type of entrance to the auditorium, so that light from without does not strike the screen when the doors are pushed open.



A RESPLENDENT SILVER MURAL IN THE ENTRANCE is illuminated by a single spotlight in the otherwise total darkness of the effective "light trap." The mural is flanked on either side by walls of Prima Vera wood.



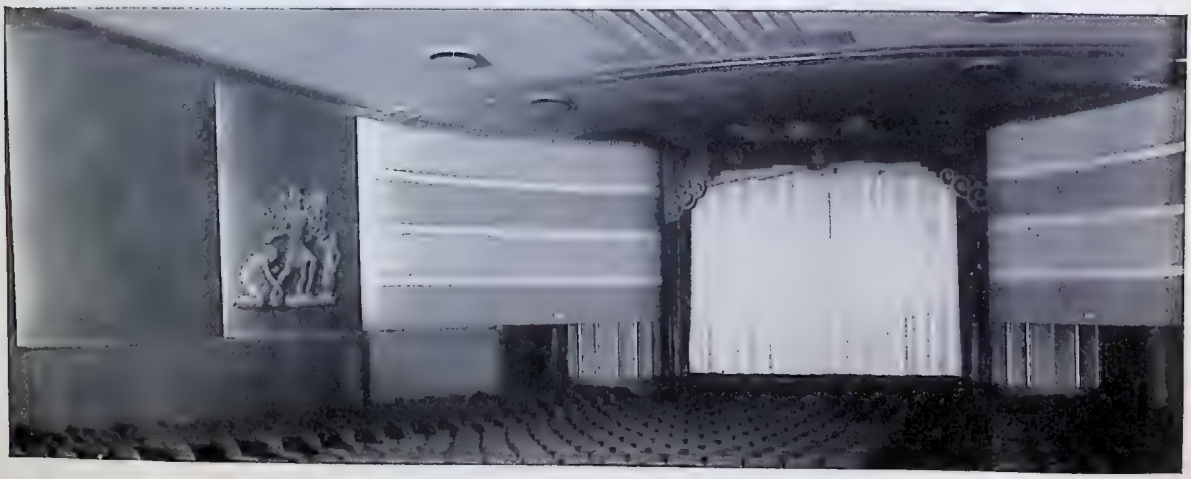


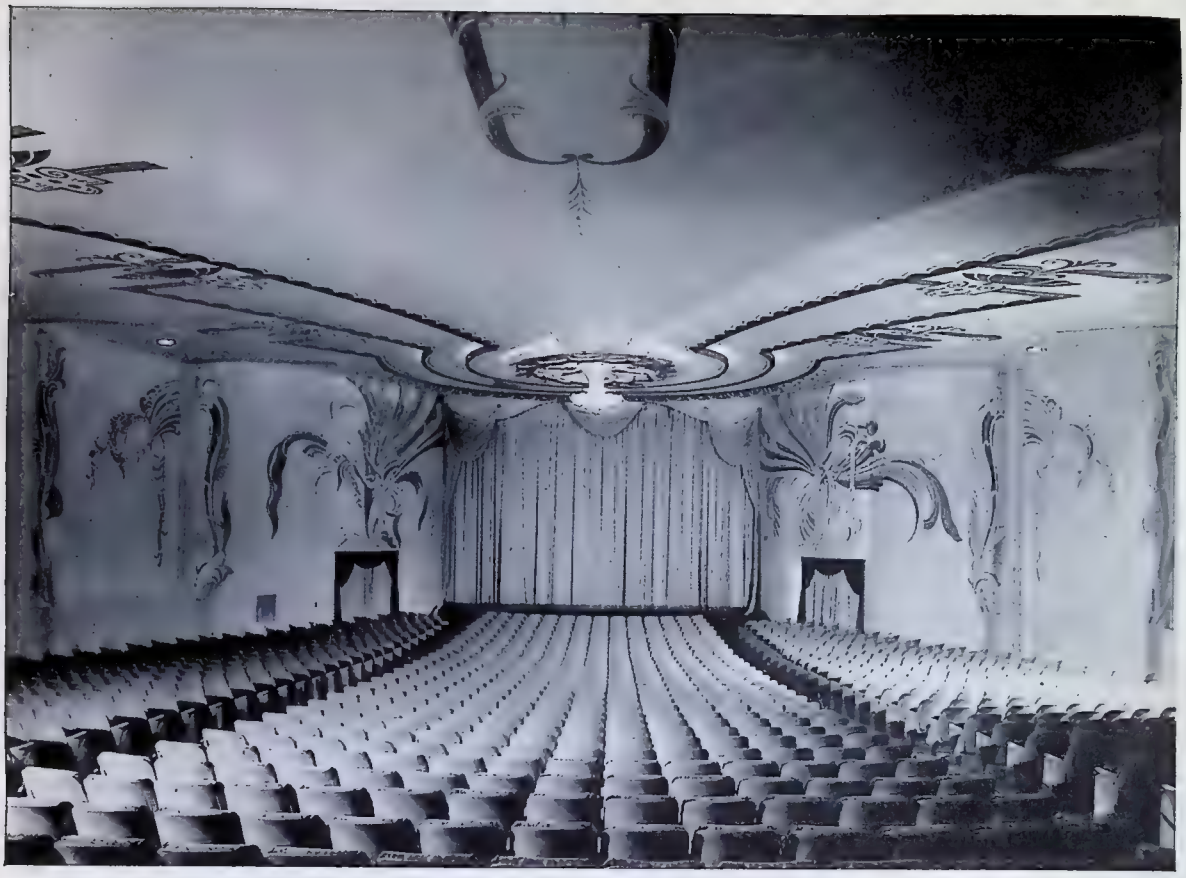


DESIGNED ACOUSTICS:

Many years ago, sound engineers determined that the noise frequency most disturbing to a theatre audience was in the lower tones, where unfortunately it is always very difficult to control because their long waves are not fully absorbed by many acoustic materials. Cross tones, that can make it possible to hear a sound twice, without an indicative echo in the room, are therefore possible. To meet this problem and still retain a "live" auditorium, Lee created a back wall design for the La Reina, Van Nuys, Calif., that has met every measuring test by acoustical engineers and is now recommended. A series of angular panels treated with acoustical plaster, and of such size and direction as to make cross tones impossible to cause sound distortion, this wall has produced sound of the highest degree of perfection. And since the wall may be decorated with the colors and motif prevailing in the balance of the auditorium, it can be blended perfectly into the decorative scheme. Acquiring good acoustical results through design rather than deadening materials is still the more advanced approach of skilled engineers and Lee is in complete accord with their efforts. Many of the current Lee plans reflect further developments.

DECORATIVE SCHEME OF THE LA REINA IS TONES OF GRAY AND GREEN WITH BURGUNDY FURNITURE AND MASSIVE RELIEF PANELS.





BLACK LIGHTED DECORATION WAS COMBINED WITH THE CONTROLLED BRILLIANCE OF NEON TUBED RECESSES IN THE ACADEMY.

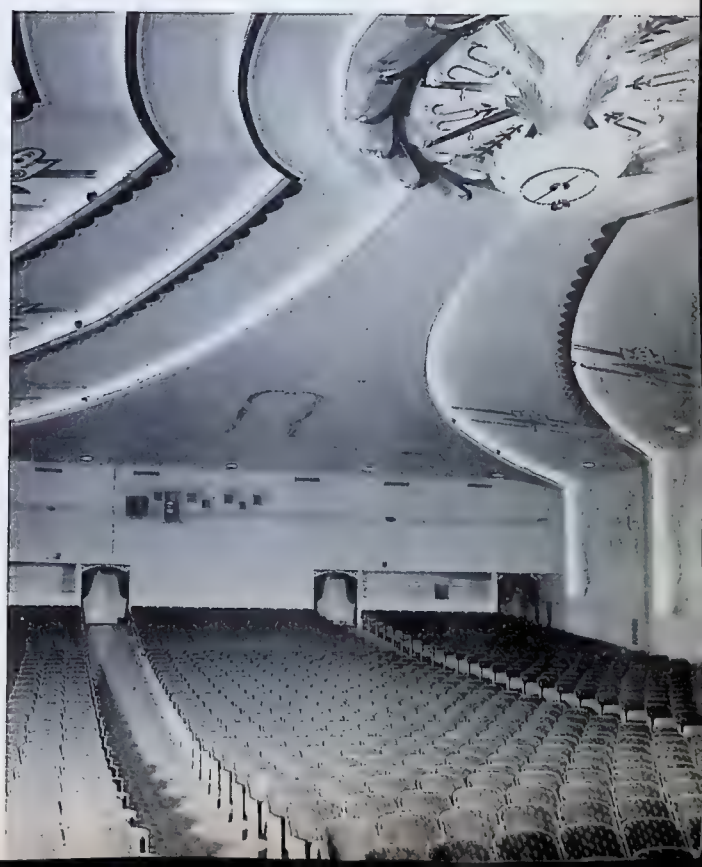
BLACK LIGHT:

One of the more recent tools in the hands of the nation's design and decorating specialists is "black light," a seemingly anomalous term referring to the fluorescing of various treated materials when exposed to the more or less invisible rays of concealed ultraviolet lamps. Obtainable in numerous paints, lacquers and dyes, its theatrical nature and theatre possibilities were obvious to its original exploiteers.

Architect Lee was one of the first to embrace this new material and to realize on its possibilities by working out some of the earliest theatre installations. The Academy, Inglewood, Calif., became virtually a black light laboratory for the first installation of lamps and the evaluation of effective distances. Both the wall decorations and the carpets glowed under black light with spectacular effects. The lamps themselves were concealed in the petals of floral ceiling fixtures, while ceiling step-offs concealed neon tubes cleverly arranged on dimmers with startling effects that contrasted to the black lighting.

Following in quick order was the Tower, Fresno, Calif., where the entire auditorium could be illuminated by black light alone with the ultraviolet lamps in urns beneath large medallions that served also as the sidewall decorative accents.

The modern treatment of the walls of the State, San Diego, Calif., the baroque decorations of the Carlos, San Carlos, Calif., which lent themselves so beautifully to highlighting, and the startingly effective decorations and carpets of the Lido, Mexico City, Mexico, are further evidence of Mr. Lee's continuing use of black light where its particular properties will have structural or boxoffice merit.





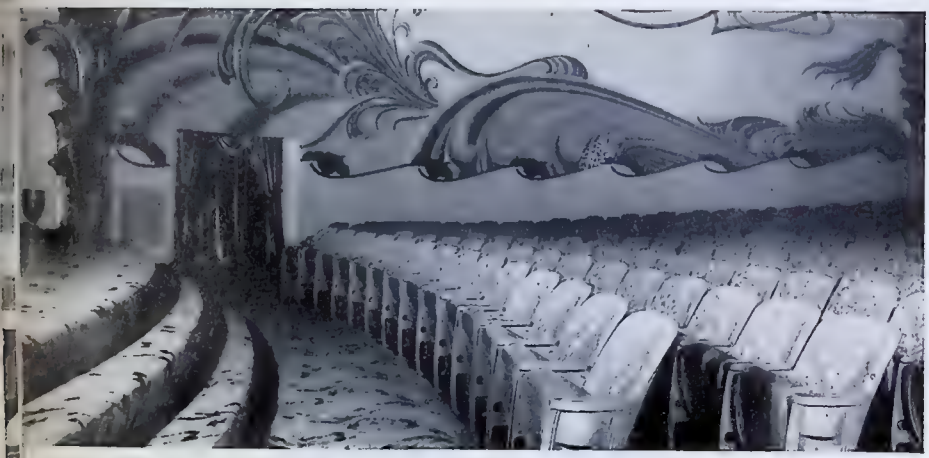


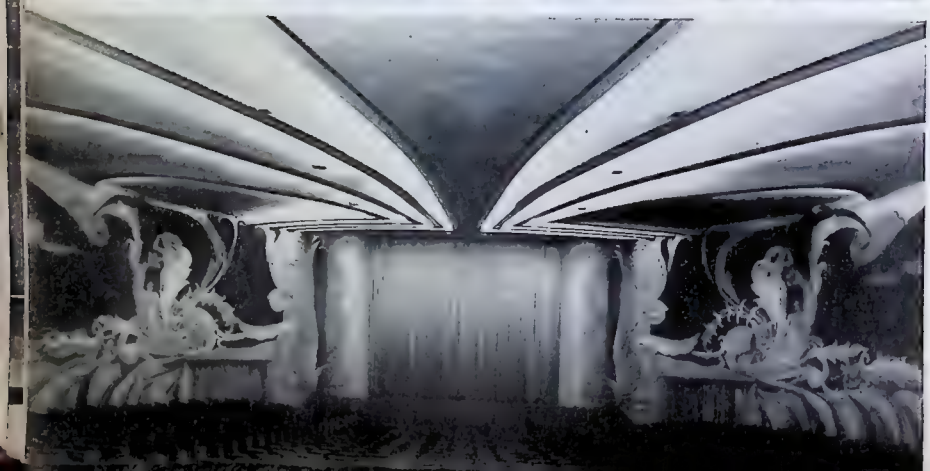
ABOVE: The large baroque decoration of the Carlos, San Carlos, Calif., lends itself to the use of black light. BELOW: Modern treatment of the walls in the State, San Diego, Calif., is made particularly pleasing by the employment of black light, and the light receptacle for carpet illumination should be noted in the chair and standards. The bottom photo illustrates the decorative scheme used in the Lido, Mexico City, Mexico, where black light adds interest to a large baroque proscenium ornamentation.





ABOVE: The auditorium and left wall of the Tower, Fresno, Calif., and BELOW the right wall and the gigantic wall medallion. Ultraviolet lamps in the urns beneath the medallions activate a dramatic effect that dominated the interior.









CONSTRUCTION ECONOMIES:

Quite naturally the economics of the carrying charges of invested capital, and of operating overhead, dictate the success or failure of any venture. For this reason Architect Lee, in common with most other design specialists is constantly searching for new materials or new methods that might effect savings in either department over the post-war high building costs and thereby make profit potentials more certain.

Back in 1947, Lee startled the motion picture industry with the statement that despite the high prices of labor and materials he had created a design and applied a construction form that he believed would produce a finished theatre building, ready for equipment, for as little as $75.00 per seat. He then went out and did it! The proof was there for all to see!

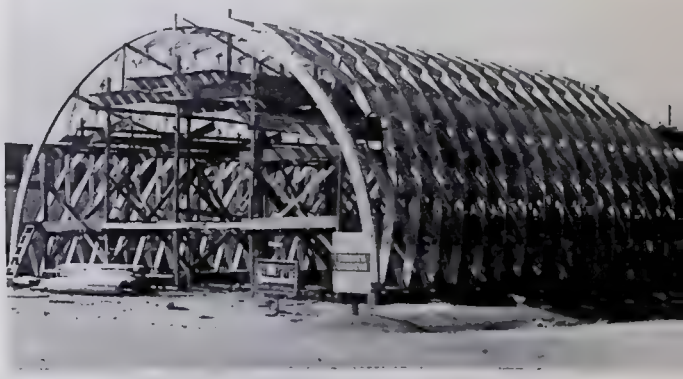
The key to this low cost structure was the Lamella roof arch, a widely accepted wood pattern that had previously never been considered to have theatre merit. Mr. Lee adapted it to a great variety of local and state building codes, solving the problems as they were posed, until now it seems that this type of construction if properly applied could be adapted to practically any locality.

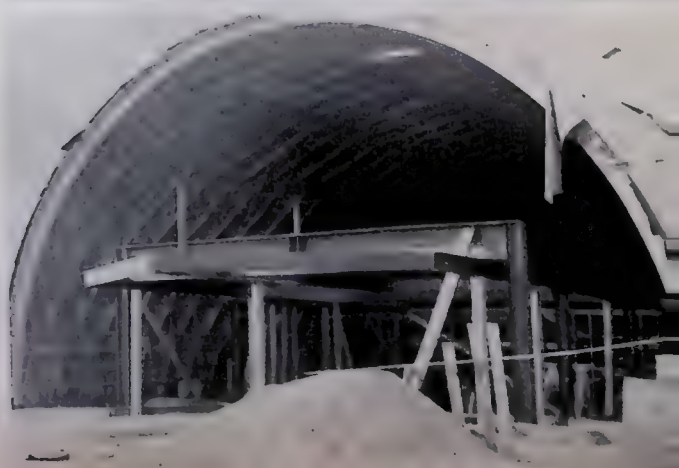
Lamella roof arches as described elsewhere in this 1949-50 Edition can be used either with masonry sidewalks or without as the occasion demands. In the former it conforms to the usual roof demands and practices. In the latter, a foundation is dug and concrete poured to approximately one foot above the surrounding grade line. A reinforced floor is then laid and becomes the general foundation. On the top of this foundation curb is bolted a wooden plate to which is fastened the rigid type diamond shaped sections of pre-cut pieces of wood. After erection, the building can be lined and surfaced in many different ways dependent only on climate and decorative effect.



LAMELLA ROOF ARCH segments are very quickly and easily formed into a pleasing auditorium design. The theatre front (bottom right) is separately constructed to any desired design and of any required materials. Covering and lining are a matter of climate and desire.



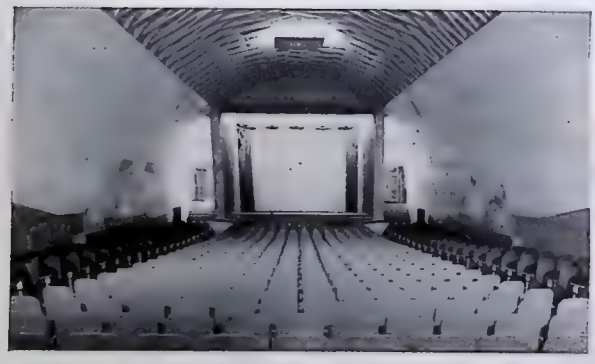












LEE DESIGNED Lamella Roof Arch theatres are: Helix, Lamesa, Calif.; Palm, Palmdale, Calif.; Puente, Puente, Calif. (auditorium only partially lined); and (below) Harper, Fontana, Calif. (a typical lobby).



The front end, containing the lobby and projection rooms of any theatres constructed on this principle, is constructed independently and in any desired variation of fireproofness and form. Numerous accompanying illustrations show the smart modern effects which can be gained. All are new and sparkling in their economical showmanship. And many areas can now have modern, well-equipped theatres where current costs would make a masonry and steel building impossible to finance or operate with any degree of economic success.

Elsewhere in this feature section will be found pictures of Lee's Tumbleweed Theatre that set a pre-war low in building costs. But even in the larger and more ornate city theatres, Mr. Lee has introduced novel materials and unusual methods designed to hold the all-important initial investment to the lowest dollar consistent with modern safety.

Most recently some of his more prominent fire-proof theatres have used a new method of erecting concrete filler walls between the load-bearing columns. Commonly known as Gunite, the fireproof and fast drying concrete is shot from compressed air guns and saves one entire form. Also, because of the resultant compressed strength, the wall thickness can be reduced so that most localities will accept a thickness of only six inches. It is preferable to put up the inside form and the reinforcing steel and then blow the Gunite from the outside; and naturally there are certain designs and methods that must be observed for best results; but not only economy but speed of construction is the result.

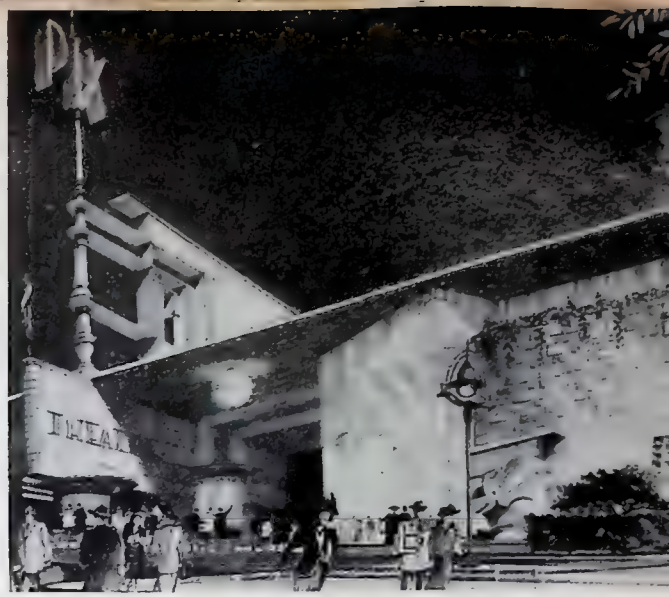
While only three heady examples of economy are here delineated, there are many more ways in which a competent architect can hold first costs and construction methods to a minimum consistent with use life, and still produce a pleasing and functionally superior showhouse.

GUNITE WALLS for filler between supporting members are adequate to both the weather resistant and fireproof needs of modern construction if properly executed. Typical is this wall section of the big La Tijera.

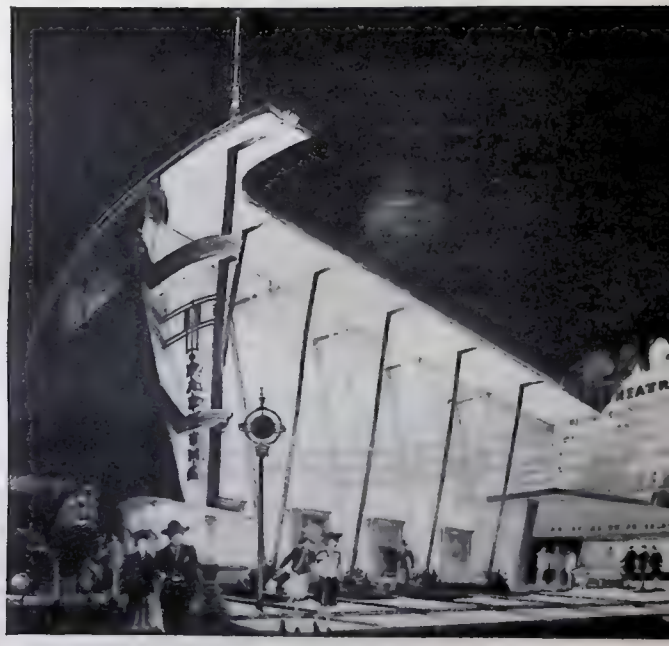


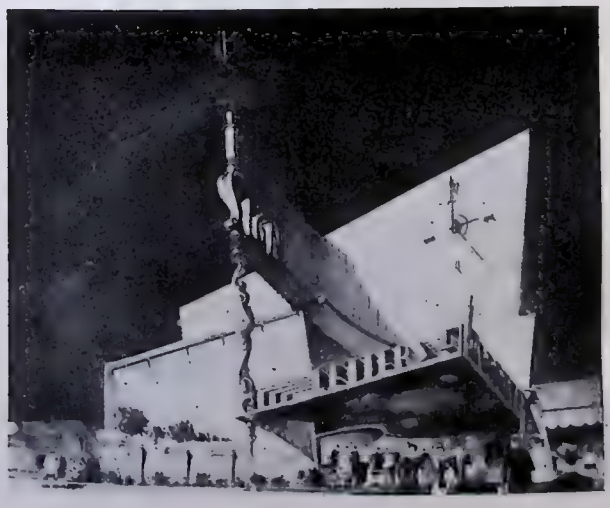
Now on the Drawing Boards

Like all successful theatre designers, the thinking and development on Lee drafting boards does not stop with the opening of one or one hundred theatres, but continues to strive for improvement and fresh approaches. On this and following pages are numerous embryonic plans that illustrate future Lee conceptions for dramatic and forceful theatre fronts.

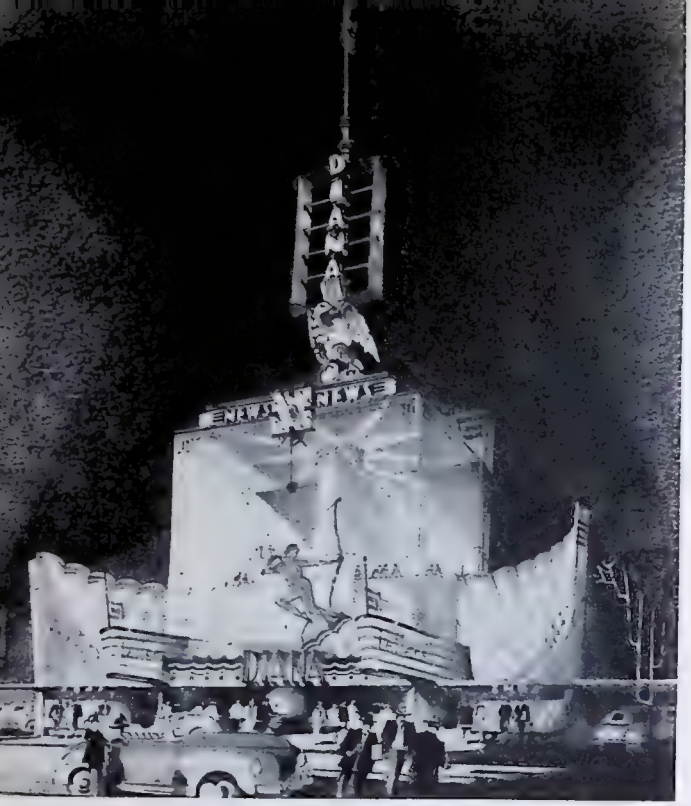




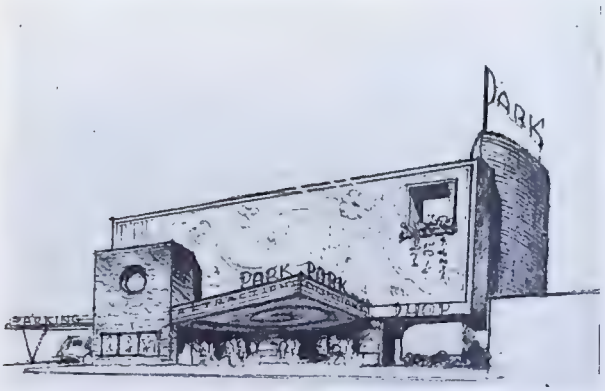




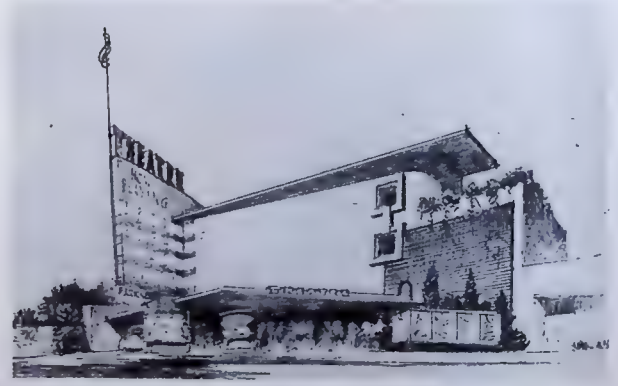



DIANA


ATTRACTION
SIGN SPACE


PARK
PARK PARK


THEATRE THEATRE




Theatre


CARMAR
NEWEST ULTRAMODERN THEATRE
MONTEBELLO, CALIF.



DESIGN

1949-50

World Motion Picture Theatres Increase

Far and Middle East and South Pacific Nations Seize Lead in New Construction and Reopenings

By NATHAN D. GOLDEN *and* EARL H. YOUNG
Motion Picture-Photographic Branch
Office of International Trade
U. S. Department of Commerce

In the reconstruction period following World War II, many motion picture theatres in foreign countries have been newly built, and many have been rebuilt to satisfy the desires of people the world over for their most economical entertainment—the motion picture.

Foreign Distribution Problems

The United States motion picture industry, while presenting Hollywood's product to world audiences, does so facing many problems. It is beset with quotas and state-controlled motion picture industries frankly calculated to curtail the opportunities for the American product. In many markets it faces a complete freeze of all its earnings, and in numerous others has received no payment for its films, while from certain other markets only a small percentage of its earnings is received. But, despite all such handicaps, Hollywood has continued its flow of United States films to the four corners of the world, enabling the peoples of those countries to see how a true democracy lives and plays. Graphically, it has been illustrating the American way of life and unquestionably has been a potent force in helping to arrest the inroads of totalitarianism.

And, too, United States films are continuing to aid other American industries to augment the demand for United States merchandise, long sought and desired abroad. When movie patrons abroad see the clothing worn by our people, the electrical labor-saving gadgets that the housewife is using in her neatly laid-out home, and the comfortable, smartly styled furniture—all bearing the mark of quality, all created by American ingenuity and know-how—the way is smoothed for United States exporters, today and in a future that may be less fraught with risks and difficulties.

BRIEF: *Although peoples in different lands cherish different ideals . . . the love for the movies is one which knows no boundaries . . . From the frozen slopes of Iceland . . . to the sweltering jungles of Africa . . . theatres are continuing to mushroom at a steady rate . . . The following comparative statistics . . . for the years 1947 and 1949 . . . prove conclusively that there has been a marked upsurge in international theatre expansion during the two-year period.*

The figures also show that . . . in spite of insuperable difficulties such as quotas and dollar exchange . . . coupled with open attempts to "freeze out" American films . . . Hollywood is still shuttling its film cans to practically every country in the world . . . to capture a formidable percentage of foreign theatre screen time . . . Whatever shortcoming the industry may have . . . failure to sell itself and its country to the world cannot rightfully be chalked up as one of them.

The contribution of American motion pictures as "silent salesmen" toward this United States sales effort is brought out significantly in a report recently submitted by American Vice Consul Blackmun (from Trinidad, in the British West Indies) who says: "During this period of currency restrictions when American merchandise is very scarce, the American film industry renders a real service to American industry as a whole by keeping American products and new developments before the public." This is convincing testimony to the way in which American motion pictures present effectively to the world a great variety of American merchandise, leading eventually to trade growth. It can be justly said that "trade still follows the film", when and where foreign restrictions do not prevent United States films from reaching screens abroad.

United States films today are facing their greatest and most intensive competition from the product of European and Latin American feature film producers. This competition is heightened by governmental assistance. Thus, exigencies make it necessary for United States interests to proceed on a basis of broad and precise information as to the potentialities of the individual markets and the number of theatre outlets available for United States films. To present concisely such essential facts, a world survey has been prepared, and the data are here presented.

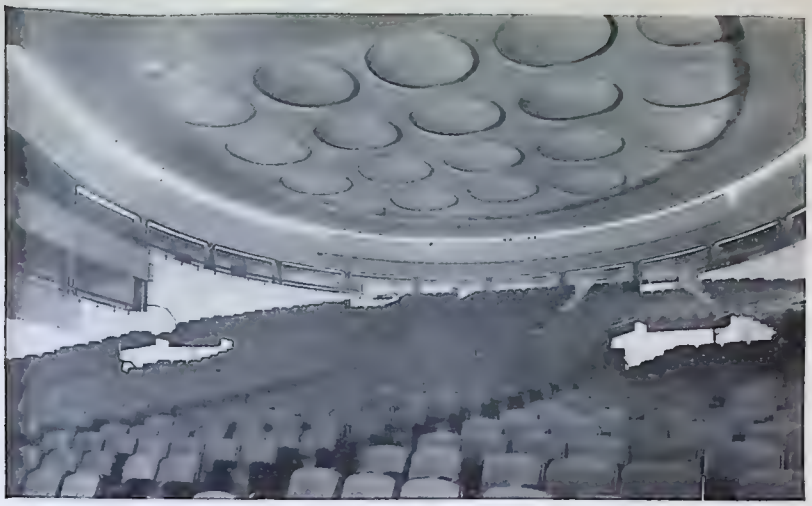
World Regional Theatre Growth

As of January 1, 1949, there were an estimated 90,097 motion picture theatres, with an estimated seating capacity for 48,750,147 people, in operation in 116 countries throughout the world. This represents an increase of 11,123 theatres over the 1947 estimated total of 78,974 theatres with 42,667,411 seats. While a part of this increase, especially in the European countries and the Far East,

Table I—World Motion Picture Theatres

Region	1947 No. of Theatres	1947 Seating Capacity	1949 No. of Theatres	1949 Seating Capacity	United States Percentage of Screen Time	Per Cent Increase Theatres	Per Cent Increase Seating
Europe	43,652	21,147,707	52,344	24,062,799	56	19.9	13.8
South America	4,672	2,988,830	4,994	3,302,529	64	6.9	10.5
Mexico and Central America	1,653	1,404,691	1,952	1,720,185	75	18.0	22.4
Caribbean Area	659	379,143	717	427,576	82	8.8	12.8
Far East	2,701	1,362,683	3,523	2,368,675	47	30.4	73.8
Middle East	1,876	969,088	2,676	1,583,425	52	42.6	63.3
South Pacific	2,080	1,411,070	2,268	1,687,460	75	9.0	19.5
Africa	1,171	706,024	1,281	784,818	62	9.4	11.1
Atlantic Islands	122	59,363	166	72,914	81	36.0	22.8
Canada	1,493	775,552	1,695	874,094	75	13.5	12.7
United States[1]	18,765	11,393,660	18,351	11,796,072	95	– 2.2	3.5
Puerto Rico	130	69,600	130	69,600	95	00.0	00.0
Totals	78,974	42,667,411	90,097	48,750,147	72	14.1	14.3

[1] 1949 United States statistics based on new survey made by Motion Picture Association of America, Inc.



CINEMA DAL VERME, MILAN, ITALY, is another of the fourteen theatres in and around the northern provinces that celebrated Architect Mario Cavalle has recently finished or has under construction. A large neighborhood theatre it is typical of the fine design accomplished through architectural planes and a minimum of actual decoration in this expanding section of the industry throughout the peninsula.

Table II—Europe

Country	1947 No. of Theatres	1947 Seating Capacity	1949 No. of Theatres	1949 Seating Capacity	United States Percentage of Screen Time
Albania	No data				
Austria	684	205,000	790	240,000	35
Belgium	1,108	526,770	1,289	612,000	70
Bulgaria	264	87,800	291	96,000	9
Czechoslovakia	1,922	695,000	1,928	611,000	30
Denmark	392	126,894	394	126,654	60
Estonia	No data				
Faroe Islands	2	270	4	490	70
Finland	462	129,660	462	129,650	60
France	4,913	2,500,000	5,163	2,620,000	50
Germany	3,703	1,296,050	5,832	2,349,995	50[2]
Gibraltar	4	2,753	3	1,853	25
Greece	167	94,000	170	100,000	80
Hungary	484	168,218	555	194,000	37
Ireland	290	159,351	260	168,428	90
Italy	5,400	3,000,000	8,138	3,119,000	74
Latvia	No data				
Liechtenstein	2	353	2	353	No data
Lithuania	No data				
Luxembourg	35	17,500	30	20,700	90
Malta	29	13,874	26	13,335	35
Netherlands	375	180,000	440	250,000	50
Norway	280	88,061	381	112,358	48
Poland	505	186,802	570	230,000	43
Portugal	298	172,543	301	177,500	80
Rumania	371	114,908	350	108,000	No data
Russia (U.S.S.R.)[1]	10,565	4,450,000	12,614	5,300,000	No data
Spain	3,143	1,500,000	3,583	1,715,000	57
Sweden	2,500	563,000	2,462	715,400	60
Switzerland	350	128,000	408	150,000	55
Trieste, Free Territory of	No data		33	12,633	56
Turkey	229	113,400	230	113,450	70
United Kingdom	4,750	4,500,000	5,000	4,600,000	60
Yugoslavia	425	127,500	635	175,000	No data
Total	43,652	21,147,707	52,344	24,062,799	56

[1] Total motion picture installations in Russia have been reported as high as 25,000 units; however, many of these are known to be portable units and units set up in halls and clubs where films are only shown occasionally.

[2] Percentage of screen time for Germany applies to United States Zone only.

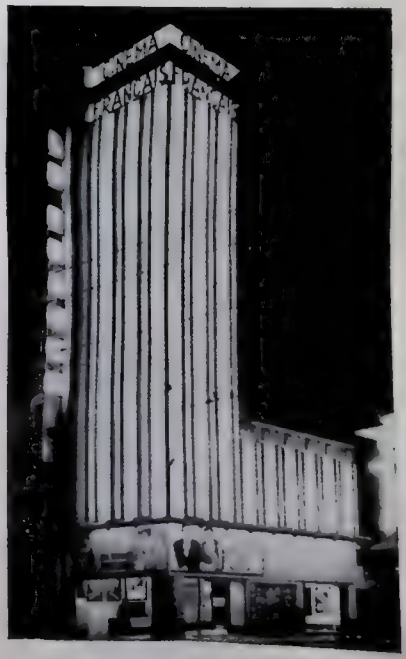
represents theatres that were closed because of the war and are now in operation again, a large portion represents new theatres that have been constructed during the past two years. Changes in the 1947 statistics from those previously published represent revisions brought about through receipt of more accurate data. Decidedly noteworthy is the fact that approximately 72 per cent of all feature films shown in the theatres of the countries covered by this survey, as of January 1, 1949, were United States productions. Table I indicates the geographical break-down of world motion picture theatres.

In Europe, in January 1949, 52,344 theatres were in operation with a seating capacity for 24,062,799 people, as compared with 43,652 theatres and 21,147,707 seats in 1947. Percentagewise, this is an increase of 19.9 per cent in theatres and 13.8 per cent in seats.

Europe, Italy and Germany have shown, during the past two years, the largest increase of theatres on the Continent. While the figure for Italy is not exact, it is the best estimate available from sources considered to be reliable. On January 1, 1949, Italy claimed 8,138 theatres with 3,119,000 seats, against 5,400 theatres with an estimated 3,000,000 seats for the same period of 1947. Germany reports 5,832 theatres in 1949 with 2,349,995 seats as compared with 3,703 theatres in 1947 with 1,296,050 seats. Revised figures from the U.S.S.R. show that, in 1949, 12,614 theatres with 5,300,000 seats were in operation as compared with 10,565 theatres with 4,450,000 seats in 1947.

No data are yet available out of Albania, Estonia, Latvia, and Lithuania in

CINEMA FRANCAIS, MARSEILLES, FRANCE, is a modern 600 seat theatre, boasting of spectacular night lighting, that was opened in 1947. Architects Pierre de Montaut, Adrienne Gorska and Gaston Castel designed it. Photo courtesy of Brockliss-Simplex, supply dealers of Paris and Marseilles.



this European round-up, and in Russia and certain satellite countries the percentage of American screen time is not available, as will be seen in Table II.

"South of the Border" Area

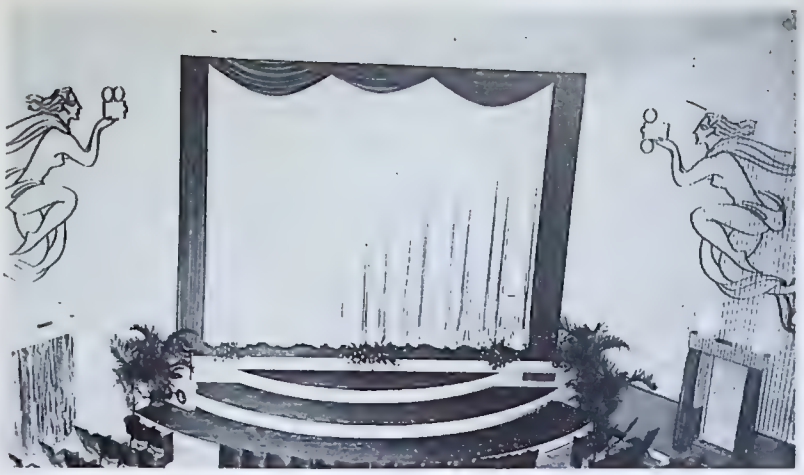
In the countries comprising Mexico, South and Central America, and the Caribbean area, as of January 1949, there were 7,663 theatres seating 5,450,290 people, as compared with 6,984 theatres with 4,772,664 seats in 1947. This rise of 679 theatres signifies a 9.7 per cent increase in theatres and a 14.2 per cent seat expansion for the period 1949 over 1947. As to United States percentage of screen time, 73 per cent of all playing time for 1949 has been for films originating north of the Rio Grande. Table III clearly shows by country the increase or decrease in motion picture theatres and the percentage of American screen time in these areas.

Far and Middle East and South Pacific Area

In the Far and Middle East and the South Pacific countries, as of January 1, 1949, there were a total of 8,467 motion picture theatres with a seating capacity for 5,639,560 persons, contrasting markedly with the 6,657 theatres seating 3,742,841 persons in 1947. It is in this area of the world that the greatest theatre expansion has taken place in the past two years. Theatre construction and reopenings to the extent of a 27.2 per cent increase is indicated for 1949 as against 1947, involving a 50.7 per cent increase in the number of seats. Percentagewise, the showing of United States films on the screens in this area is the lowest in the world, reaching only 55

CINE OPERA, MEXICO CITY, MEXICO, is a big 4200 seat second-run theatre that took over three years to build. Architect Felix T. Nuncio designed it for Owners Oscar and Samuel Granat and it boasts of excellent equipment, all furnished by F. Mier and Brother, dealers, of Mexico City.





LOS ANGELES THEATRE, HAVANA, CUBA, opened March 9, 1949, and was designed by Architect Cesar Rodriguez Molina for Owners Oscar DeFreixas and Gervasio Toca. Of 1300 seating capacity, the front, service rooms and auditorium are lavishly furnished, decorated and equipped. Pedro Saenz, of National Supply, S. A., installed three SIMPLEX Projectors and Sound Systems, three PEERLESS Lamps, etc.

Table III—South America, Mexico and Central America, and Caribbean Area

Country	1947 No. of Theatres	1947 Seating Capacity	1949 No. of Theatres	1949 Seating Capacity	United States Percentage of Screen Time
SOUTH AMERICA					
Argentina	1,547	871,928	1,690	945,000	60
Bolivia	42	28,550	45	31,000	68
Brazil	1,490	936,000	1,575	1,104,039	76
British Guiana	30	24,200	30	25,000	80
Chile	312	271,126	315	272,000	75
Colombia	430	250,000	445	250,000	50
Ecuador	71	71,270	84	85,000	65
French Guiana	1	500	1	500	50
Paraguay	16	8,900	26	11,000	70
Peru	212	191,535	253	235,000	53
Surinam	5	3,430	6	4,355	90
Uruguay	178	106,391	194	109,635	56
Venezuela	338	225,000	330	230,000	40
Total	4,672	2,988,830	4,994	3,302,529	64
MEXICO AND CENTRAL AMERICA					
Mexico	1,369	1,204,525	1,666	1,500,000	55
British Honduras	4	1,750	4	1,600	98
Costa Rica	73	40,549	77	36,013	68
El Salvador	35	32,700	28	38,382	78
Guatemala	39	16,500	42	32,000	75
Honduras	30	21,000	26	19,048	69
Nicaragua	44	41,037	47	43,837	83
Panama, Republic of	59	46,630	62	49,305	75
Total	1,653	1,404,691	1,952	1,720,185	75
CARIBBEAN AREA					
Bahamas	4	2,367	5	2,523	90
Barbados	3	1,892	3	2,050	80
Bermuda	9	3,000	15	4,350	95
Cuba	485	280,052	521	316,573	70
Curacao and Aruba	11	8,287	14	9,000	95
Dominican Republic	47	20,090	53	23,000	60
French West Indies	20	8,400	20	8,400	50
Haiti	10	6,300	8	3,900	80
Jamaica	19	15,000	28	22,717	94
Leeward Islands	7	3,000	6	2,600	97
Trinidad and Tobago	41	28,855	40	29,713	77
Windward Islands	3	1,900	4	2,750	95
Total	659	379,143	717	427,576	82



RAS TANURA THEATRE, RAS TANURA, SAUDI ARABIA, was designed by Architects Spackman and Peterson, of San Francisco, Calif., and was erected by native craftsmen for the Arabian American Oil Company (ARAMCO) as a convenience and touch of home for their resident workers. Built on the desert sands only a few hundred feet from the Persian Gulf it contains 400 seats in the covered auditorium but serves also a large outdoor bowl for use on clear evenings of which there are an average of 265 per year.

Table IV—Far East, Middle East, and South Pacific

Country	1947 No. of Theatres	1947 Seating Capacity	1949 No. of Theatres	1949 Seating Capacity	United States Percentage of Screen Time
FAR EAST					
Burma	No data		75	85,000	35
China[1]	163	164,423	334	550,000	55
Manchuria	115	71,817			
Formosa	116	82,230			
French Indochina	36	17,870	63	26,400	25
Hong Kong	12	14,638	37	35,462	30
Japan	1,603	658,374	2,157	1,223,914	31
Macao	6	5,331	6	4,789	30
Netherlands Indies	160	64,000	200	90,000	44
Philippines, Republic of	283	170,000	275	160,000	80
Siam	67	54,000	90	68,000	90
Singapore and Malayan Union	140	60,000	170	70,000	50
South Korea	No data		116	55,110	50
Total	2,701	1,362,683	3,523	2,368,675	47
MIDDLE EAST					
Afghanistan	1	700	1	700	40
Aden (Arabia)	6	2,700	7	4,330	65
Ceylon	42	20,000	81	45,000	26
India	1,605	802,500	1,948	1,266,200	50
Iran	40	27,000	60	32,850	68
Iraq	36	31,668	54	48,660	64
Lebanon	32	16,985	35	19,985	65
Pakistan[2]	No data		352	88,000	15
Palestine	73	47,120	94	55,000	70
Syria	41	20,415	44	22,700	60
Total	1,876	969,088	2,676	1,583,425	52
SOUTH PACIFIC					
Australia	1,600	1,148,746	1,674	1,403,000	85
Fiji Islands	11	4,920	15	5,314	70
New Caledonia	3	2,100	3	1,800	48
New Zealand	458	252,304	568	273,946	83
Society Islands	8	3,000	8	3,400	90
Total	2,080	1,411,070	2,268	1,687,460	75

[1] 1949 statistics for China include Manchuria and Formosa.
[2] Included in Indian statistics for 1947. Pakistan was created by the partitioning of India in August, 1947.

per cent. As will be noted, this low percentage is attributable primarily to the situation in the Far East; and it can be assumed that, with the so-called rebirth of the Japanese motion picture industry and the intensive drive by British film distributors, the showing of American films is affected considerably.

Japan, as would be expected, shows the greatest increase in theatres during this two-year period. On January 1, 1949, 2,157 theatres seating 1,223,914 people were reported, against 1,603 theatres seating 658,374 persons in 1947. This represents a 34.5 per cent increase in theatres and a 85.9 per cent increase in seats.

In the countries comprising the Middle East there were, as of January 1, 1949, 2,676 theatres seating 1,583,425 people, as compared with 1,876 theatres seating 969,088 persons at the same time in 1947—the increase thus being 42.6 per cent in theatre facilities and 63.3 per cent in seats. Of the screen time available in the Middle East countries, films from the United States held 52 per cent of the showings.

The "India" area shows the largest increase in theatre development in this great region. Before the splitting up of India and Pakistan in 1947 there were in the country 1,605 theatres seating 802,500 people. Today there are 1,948 theatres in that portion now comprising



ODEON THEATRE, PORT KEMBLA, AUSTRALIA, is a 1400 seat two-floored house containing 1400 seats, designed by Architect R. J. Magoffin for Greater Union Theatres circuit. (Below) TEATRO IMPERIO, VALPARAISO, CHILE, was recently remodeled by Architect Arnaldo Barison for Owner Enrique Scliappacasse. Shown is the deluxe lobby.



India, seating 1,266,200, and 352 theatres in Pakistan, seating 88,000 persons.

Theatre expansion for the present India and Pakistan is, therefore, 43.3 per cent for theatres and 68.7 per cent for seats. For what is now India there are 343 more theatres, or a 21.3 per cent increase, and a 57.7 per cent increase in seatage over what existed in the market before the geographical division. Table IV gives in detail a country breakdown of theatres.

Africa and Atlantic Islands Area

In the countries and possessions comprising Africa, information at hand shows that on January 1, 1949, there were 1,281 theatres with 784,818 seats, as compared with 1,171 theatres with 706,024 seats in 1947. This represents a 9.4 per cent increase in theatres and a 11.1 per cent increase in seatage. Films from the United States occupied 62 per cent of the screen time in all of Africa.

In the Atlantic Islands there were a total of 166 theatres seating 72,914 persons, as of January 1, 1949, against 122 theatres seating 59,363 persons in 1947. This represents a theatre expansion of 36 per cent, and 22.8 per cent more seats. Eighty-one per cent of all the films shown in this far-flung area came from the United States. Table V gives detailed country data.



NATIONAL TALKIES, NANDYAL, INDIA, has 864 seats and opened in 1949. Architect: S. G. Amarnath. Owners: A. Nagabhushanam Chetty and S. M. Rahmatullah. Supply dealer: Evergreen (Bangalore) Ltd. (Below) GRAND OPERA HOUSE, MANILA, PHILIPPINES REPUBLIC, boasts of a spectacular lobby. Dealer: S. M. Berger & Co.





LIBERTY CINEMA, BOMBAY, INDIA, was opened in 1949 as one of the finest and most modern theatres in that new nation. Designed by Architects M. A. Riddley-Abbot and J. B. Fernandes, and decorated by W. M. Namjosi, the equipment is preponderantly American supplied by Photophone Equipments, Ltd. In addition to "Push Back" chairs, three RCA Projectors and Sound Systems and three BRENKERT ENARC lamps contribute to its glamour and efficiency. It shows only native Indian productions.

Table V—Africa and Atlantic Islands

Country	1947 No. of Theatres	1947 Seating Capacity	1949 No. of Theatres	1949 Seating Capacity	United States Percentage of Screen Time
AFRICA					
Algeria	188	114,464	220	134,000	67
Angola	18	7,900	15	5,295	90
Belgian Congo	11	3,550	34	5,900	50
Egypt	184	188,600	194	190,118	60
Eritrea	17	17,000	17	17,000	90
Ethiopia	6	4,600	7	5,400	90
French Equatorial Africa	5	1,000	5	1,000	40
French Morocco	82	42,778	86	49,000	35
French West Africa	41	16,700	60	40,000	40
Gold Coast	12	4,530	14	11,520	55
Kenya (British East Africa)	35	15,700	44	19,350	60
Liberia[1]	1	200		None	
Madagascar	18	8,450	16	8,200	60
Mozambique	5	4,198	9	6,450	70
Nigeria	16	5,500	25	13,250	66
Reunion	9	3,400	8	3,700	40
Spanish Morocco	18	9,200	18	13,500	55
Tangier, International Zone	8	5,390	8	5,435	55
Tunisia	45	22,764	49	25,700	63
Union of South Africa	452	230,000	452	230,000	85
Total	1,171	706,024	1,281	784,818	62
ATLANTIC ISLANDS					
Azores	18	10,304	18	10,304	90
Canary Islands	50	28,473	91	39,200	71
Cape Verde Islands	2	900	2	900	80
Greenland[2]	5	700		None	
Iceland	36	10,590	43	11,865	70
Madeira Islands	3	3,268	3	3,750	95
Newfoundland	8	5,128	9	6,895	80
Total	122	59,363	166	72,914	81

[1] The one 35 mm. theatre in Liberia discontinued operation when the only distributor there switched to 16 mm. films. There are three 16 mm. theatres operating in Liberia.

[2] There are in Greenland no theatres in the ordinary sense of the term. There are five projectors operated by the Greenland Administration giving occasional shows in halls throughout the country.

Desirable Locations for Theatre Sites

Modern Scientific Methods May Be Used to Estimate the Drawing Potentialities of a Proposed Location

By E. G. Faludi, D. A.
Managing Director
Town Planning Consultants Limited, Toronto, Canada

BRIEF: ***Land economics, sociology, and physical planning have enabled us to determine with scientific exactness the characteristics of the urban retail structure, of which the theatre is a part . . . Today, the selection of the location of the theatre is more important than ever before because of various new trends adversely affecting the motion picture industry . . . The following is the basic information required to determine the suitability of a location and site for a theatre: size of the tributary population; living and spending habits; the retail pattern; physical characteristics; and the anticipated development of the area . . . Once these factors are ascertained, we can determine the relation between seating capacity and population in the tributary area and evaluate the economics involved.***

Over the period of half a century, the motion picture industry has grown to one of the five largest industries in the United States. This achievement is partly because of the leadership of a pioneer generation which had the business acumen to foresee the possibilities inherent in the motion picture and which had the capacity to develop and industrialize it. For the last ten years, however, social and economic trends, new technological inventions, and developments within urban and rural areas have been endangering the privileged position of this industry.

What the direct effect of these trends and changes will be on the industry as a whole is difficult to forecast, since no over-all survey has been undertaken covering each of its fields or branches.

However, sufficient data and information are available to define the anticipated effects on the motion picture theatre and to establish the conditions under which it may operate and serve a community most successfully.

Trend in Social Activities and the Motion Picture Theatre

The importance of the trend in social activities as related to the motion picture theatre is revealed by recent surveys conducted on the North American continent and in five European countries. In one of these surveys the question was asked "Would you mind telling me which, if any, of the following you did last night?" The person interviewed gave his answer from the list of activities and the answers were compared, as shown in Table I.

This survey indicates that in the United States and Canada, as a form of commercial entertainment the radio attracts four times as many people as motion pictures. (See Fig. 1.) The high percentage of radio listeners in relation to those who go to motion pictures is chiefly because the former offers free entertainment. In the field of paid entertainment the closest competition is the sport show which attracts 4 per cent as compared with the 7 per cent attracted by the motion picture.

Trend in Social Habits as Related to the Motion Picture Theatre

The most recent indication of the impact which television is having on social habits is contained in a survey conducted by the Duane Jones Company among television-set owners in the metropolitan area of New York. A questionnaire was mailed out in mid-November to 4500 television-set owners, and the results are based on a 35 per cent response.

Of those answering the poll, 92.4 per cent said that they now listened less to the radio, 80.9 per cent see fewer motion pictures, 58.9 per cent read books less, 48.5 per cent read magazines less, and 23.9 per cent read newspapers less.

On the other side of the ledger, 72.1 per cent reported that more children visited their homes on social visits and 76.8 per cent said that their adult entertainment had increased.

Table I—Survey of Social Activities

	U. S. A. and Canada	Denmark	Holland	Sweden	Norway	France
	Percentage					
Read	19	23	17	21	21	21
Listened to radio	28	13	18	22	18	22
Entertained or was entertained	17	16	18	19	6	12
Played cards	10	6	6	2	4	1
Went to motion pictures or theatre	7	4	7	4	5	7
Watched sports	4	...	1	...	...	...
Danced	2	...	1	...	1	1
Other	13	38	32	32	45	36
	100	100	100	100	100	100

The Theatre and Population

In order to evaluate these data with reference to anticipated theatre attendance, we shall consider first the potentiality of the theatre in relation to population figures.

Reprint of a paper presented April 9, 1949, at the Society of Motion Picture Engineers Convention in New York and published in the Journal of the S.M.P.E., October, 1949.

In the large urban centers of Canada and the United States, there is a theatre seat provided for every 7 to 8 people. In Canada with a population of approximately 12,300,000 there were 1477 theatres in 1946, having a total seating capacity of 758,640, a seat for every 17 persons. The total number of admissions was 215,000,000 or 293 per seat for the year. The average revenue per seat for the year was $72.00.

Had each theatre played to a full house at each performance attendance could have numbered 605,000,000. Actually, therefore, only 37.6 per cent of the total seating capacity of the theatre was utilized. It may be assumed that this figure will decrease because of the following trends:

1. Technological
   The development of television, bringing visual entertainment within easy reach of the individual and large groups as well.
2. Social
   The increasing interest in home entertainment, which radio and television provide free.
3. Economic
   The decrease in effective family income, because of reduction of industrial employment opportunities for women and the change from inflation to deflation in our economy.
4. Physical
   The increasing demand for up-to-date facilities and conveniences inside and outside the theatre auditorium, because of competition with other forms of commercial entertainment and the increasing number of cars.
5. Urban Development
   The decentralization of industries and the development of new residential areas

on the fringe of established urban centers, which will make necessary new theatre facilities at the expense of those already established in the regional area.

In view of these trends, the theatre operator who intends to build a new theatre faces the following problems:

(a) how to utilize more than 37 to 40 per cent of the potential seating capacity.

(b) and consequently, how to achieve a profitable yearly revenue per seat.

The answers to these problems cannot be provided simply by a mathematical formula, but only by considering a number of factors involved.

6. Determining Factors of Revenue per Seat

There are four major factors which directly affect the revenue per seat of a theatre:

(a) The class of picture the theatre offers. (This depends largely on the films available in the motion picture film market and the demand of the population from which the theatre draws its attendance, as related to age groups, purchasing capacity, spending habits.)

(b) The location of the theatre from the point of view of accessibility and the population density of the surrounding residential areas within a mile radius.

(c) The size and design of the theatre which ultimately governs the capital investment and the operating costs.

(d) The facilities provided by the theatre inside and outside the auditorium.

7. Importance of Location

The importance of the location of the theatre cannot be overemphasized. Literally, many millions of dollars are involved in the selection of proper locations for theatres. There is no doubt that good pictures can modify temporarily the handicap of an inappropriate site but they cannot completely overcome this disadvantage.

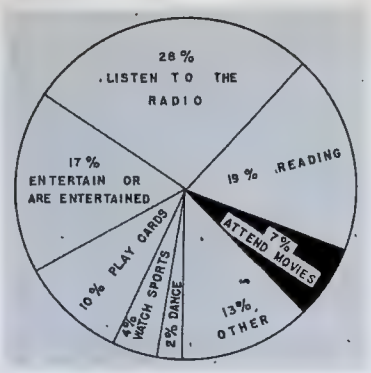


Fig. 1—Social activities in the United States and Canada, reduced to "pre-chart form."

In order to analyze the specific locations that are more desirable than others, we shall distinguish the following areas, in which theatre sites may be considered:

1. Large urban centers.
2. Fringe areas.
3. Suburban neighborhoods.
4. Small towns in the regional areas of large cities.

Locations of Theatres in Large Urban Centers

The basic structure of a city is composed of several functional areas—central retail and business sections, wholesale areas, industrial areas, residential districts, and their neighborhood shopping centers. These areas are generally scattered segments of a series of concentric circles. At the center is the financial and office district, immediately surrounding this is the central shopping area. In one section of the latter there is always a scattering of theatres, generally next to the window display stores. The motion picture theatre tries to attract the man, or especially the woman, on the street. To do this, it must be easily accessible to the window-shopping crowd.

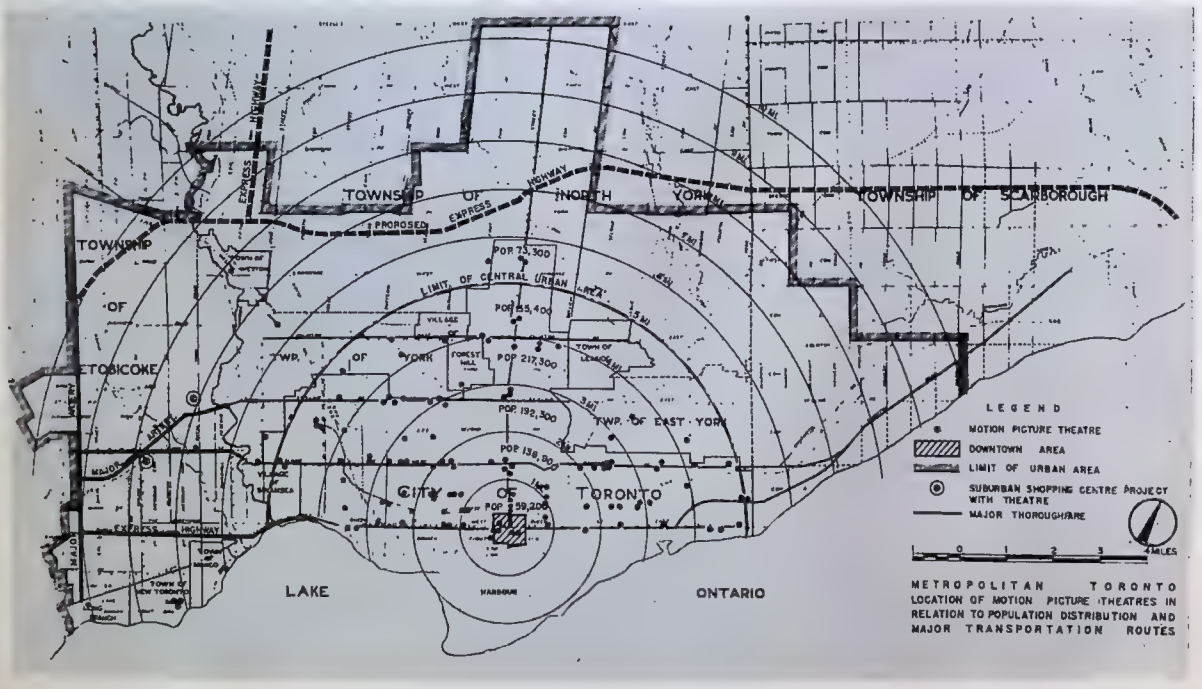
The motion picture business has demonstrated clearly how proximity of competing houses aids business. In many cities, all the downtown motion picture houses are located on one street, and even within three or four adjoining blocks.

A survey and analysis of retail centers of 24 cities in 20 different states, covering 135 blocks, reveals an interesting pattern and relationship between theatres and stores.

According to this survey, theatres represent 10.7 per cent of all store units, while restaurants represent 9.2 per cent. The next types in order of importance are shoes, jewelry, and men's furnishings, each about 5 to 6 per cent, women's clothing stores, candy, drug, cigar stores, each about 2 to 3 per cent. Restaurants and snack bars are in nearly every block where there is a theatre. Moreover there are almost as many restaurants in a block containing theatres as there are theatres.

With the exception of downtown areas, theatres show no strong tendency to be grouped in the same blocks. In 135 blocks

Fig. 2—Map of theatre locations.



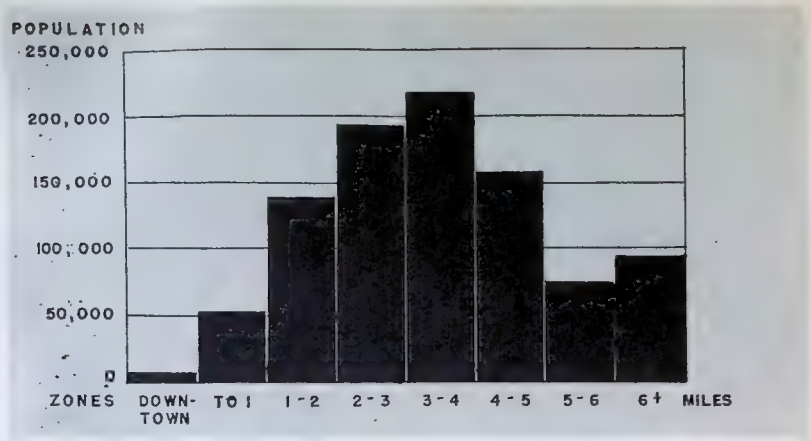


Fig. 3—Population on concentric one-mile zone.

containing theatres, two theatres per block were found in only 13 cases, and three theatres per block in three cases.

Generally speaking, in blocks containing theatres, the following store uses comprise one half of the total occupancies: theatres, restaurants, men's furnishings, shoes, jewelry, women's clothing, candy, drugs, and cigars.

An important share of the retail business of the city is, however, conducted outside the central area in retail subcenters extending along major streets and in neighborhood shopping nuclei. In such locations, the proximity of residential districts justifies the location of a theatre.

Population and Theatres—Toronto

An interesting study covering the city of Toronto indicates the relationship of population to theatres situated outside the downtown business center. The survey was conducted within concentric zones one mile apart. (See Figs. 2 and 3.) The first zone is around the central shopping area and the last one, 6 miles distant, takes in the fringe of the metropolitan area. Table II shows the number of people and theatres at various distances from downtown Toronto and the population per theatre seat.

This tabulation reveals that the number of theatres and their seating capacity increase as the population increases up to the zone which is 3 to 4 miles from the downtown area. (See Figs. 4, 5, and 6.) These figures then decrease to the limit of the urban area which is 6 miles from the center. Population per theatre and per seat, however, increases from about 4745 to 11,650 and from 5.16 to 17.93, respectively. The figures also indicate that the supporting population required per seat increases with the distance of the zones from the center, increasing by approximately 2 to 3 persons per mile.

Another interesting feature of the survey is that there is a relation between the number of the supporting population required and the density of residential population per acre, the purchasing capacity, and the spending habits of the residents. In high-density areas with low-income groups, the supporting population per seat varies from 3.3 to 7. In low-density areas with high-income-class groups, it varies from 7 to 19.

The nucleus of retail business along thoroughfares attracts the establishment of theatres. In Toronto, along three major thoroughfares, on a stretch of 6 miles, there are 25, 17, and 16 theatres, respectively. Along secondary thoroughfares for the same distance, the maximum number is 8, and the minimum is 1. Both these major and secondary thoroughfares possess a large number of scattered shopping and convenience goods stores, and carry a heavy concentration of vehicular traffic.

Locations of Theatres in Fringe Areas

The Toronto survey shows that between the 5- and 6-mile zone there is a population of 73,000 with 8 theatres, having a total seating capacity of 6000. The average seating capacity of these theatres is 750. The average number of people per theatre is 9000 and per seat 12. The location of the theatre is closely related to the local shopping area, which consists of a large number of grocery, fruit, and vegetable, drug stores, meat markets, and other convenience goods outlets, interspersed with a lesser number of men's and ladies' wear stores. Almost without exception these stores draw customers from within easy walking distance, that is, from the area within a ¾-mile radius. It is obvious that a new theatre here depends exclusively on the number of people living in such an area.

Location of Theatres in Suburban Neighborhoods

The suburban neighborhoods are the frontiers of future urban development, and therefore they are potential locations for new types of shopping centers and theatre sites.

Both the United States and Canada have embarked on a vast housing program. In the coming decade, in all likelihood, millions of homes will be built. The recognized trend is toward the establishment of residential districts in which residents share the common services, social activities, and facilities provided in the vicinity of the dwelling. Such neighborhoods obviously depend on the larger urban centers for their basic employment, transportation, and cultural facilities. Their shopping centers should contain only the types and number of stores which can be well supported by their own population.

However, if the shopping center is near to highway approaches from other areas, it frequently will draw a sizable portion of business from outside its tributary and trading area. It may attract attendance from the urban center itself if large parking areas are provided, and thus reverse the magnetic attraction of some theatres situated in the central area.

The greater the increase of population in outlying areas, which is expected to result from the construction of urban freeways or limited-access highways providing access to the central city area, the greater will be the growth of outlying neighborhood business centers.

In the Toronto metropolitan area, two large-scale neighborhood business developments with theatres are under prepa-

Table II—Relation Between Theatre Location and Population per Seat

(Data—1945 population map—Town Planning Consultants Limited)

	Population	Theatres	Seats	Persons per Theatre	Persons per Seat
1. Downtown area	7,000	9	13,583	660	0.52
2. Within 1-mile radius excluding the downtown area	52,200	11	10,115	4,745	5.16
3. Between 1- and 2-mile radius	138,900	19	16,566	7,310	8.41
4. Between 2- and 3-mile radius	192,300	28	21,420	6,868	8.97
5. Between 3- and 4-mile radius	217,300	26	21,042	8,358	10.33
6. Between 4- and 5-mile radius	155,400	19	15,851	8,179	9.80
7. Between 5- and 6-mile radius	73,200	8	6,092	9,275	12.00
8. Beyond 6-mile radius	93,200	8	5,198	11,650	17.93

Metropolitan Area Toronto

Total Population (1946 estimates, Dominion Bureau of Statistics)

Population	Theatres	Persons per Theatre
959,308	128	7373

ration at present. In each case, the theatres planned will be twin buildings starting with an auditorium of 750 seats, which will be duplicated later as warranted by population increase. Parking facilities will be provided for over 500 cars, or one parking space for every 1½ seats.

Location of Theatres in Small Towns

The small town is rapidly coming to the fore all over the country. It has been demonstrated that industry is tending to operate in a larger number of places rather than concentrating in already congested areas. The small cities where industries are or may be located fall into two categories: those with a population between 10,000 and 25,000 (there are 662 such towns in the United States); and those with a population between 25,000 and 50,000 (there are 212 such cities in the United States).

Some of these are independent communities, depending on a metropolis in no major way. Another type is the suburban residential city closely related, physically and economically, to a large city. There are also those small communities which are dependent upon a single industry, and are closely affected by its fluctuations.

In all these communities new theatres with up-to-date facilities will be required as industrial and population growth will warrant it.

When locating a theatre in these communities a careful study will be required of existing theatre facilities and population per seat, population growth, age groups, purchasing power, and spending habits as well as the characteristics of the business centers.

Conclusions

In the early stages of the motion picture industry the location of the theatre was chosen by pure common sense and intuition. The theatre industry had no tradition, and had to find its own way by experimental and empirical methods. However, with the help of land economics, sociology, and physical planning, we are able to determine with scientific exactness, the characteristics of the dynamic organism of the city. We are also able to identify the reasons for constant flux of the retail structure in the urban areas in response to economic forces. As the theatre is part of the urban retail structure, to a large degree, it succeeds or fails as its location within the city structure is favorable or unfavorable.

Today the selection of the location is more important than ever because of the new trends already mentioned.

The following are the basic steps in determining the suitability of a location or site:

1. To determine the size of the population from which the anticipated attendance will be drawn, within a radius of 1 to 2 miles.
2. To identify the social and economic groups of the area tributary to the theatre and the living and spending habits within these groups; also to identify the age composition of the population and to determine the population density and population growth.
3. To study the retail pattern of the area, the accessibility of the site, traffic conditions, and transportation facilities.
4. To define future residential, industrial, or commercial developments and probable changes in the area with reference to planning projects (new housing, zoning, slum clearance, and highways).
5. To consider these findings in relation to existing theatres in the area, their seating capacity, and population per seat in the tributary area.
6. To evaluate all findings in relation to capital investment in land and building, anticipated operating costs, and revenue.

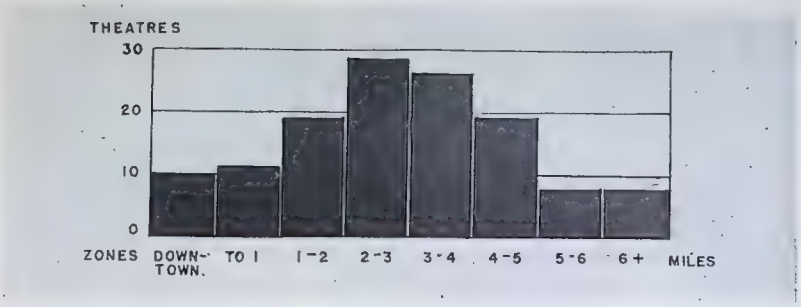


Fig. 4—Theatres in concentric one-mile zones.

While we should remember that special conditions prevail in each community, this suggested technique will assist with certainty, in selecting a desirable location for a theatre.

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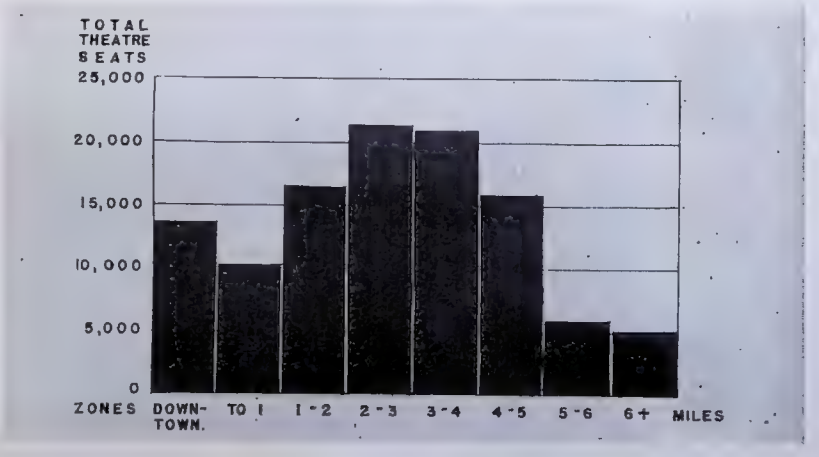
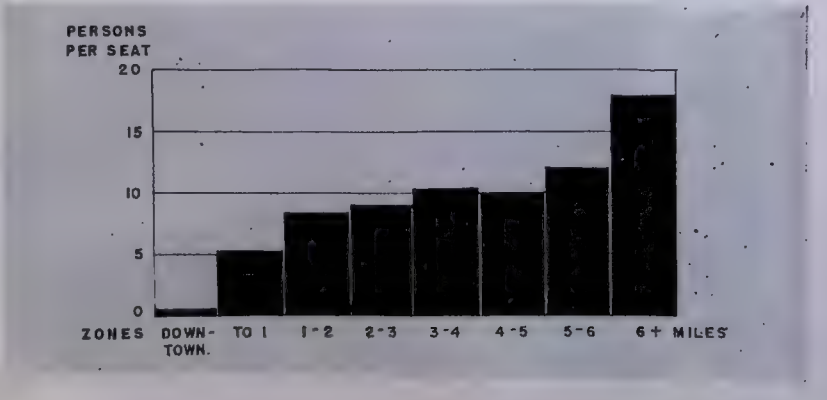


Fig. 5—Total theatre seats in concentric one-mile zones.

Fig. 6—Persons per theatre seat in concentric one-mile zones.



A Building Expert Surveys the Future

Distribution Changes Foreseen in Shift of Theatre Trade Focal Point from Downtown to Outlying Areas

BRIEF: *A mere glance at the ethnological side of history suffices to show that . . . whenever population areas become overcrowded . . . people migrate to other less densely inhabited territories . . . taking their trade with them. Since the turn of the century we have witnessed a migration of a domestic nature . . . a growing tidal wave of movement away from urban to suburban areas . . . Business, therefore, has been compelled to follow its customers into the outlying centers of population.*

Another factor, the automobile . . . with its attendant parking problems . . . has hastened this steady outward progression of commercial enterprise . . . away from metropolitan to neighborhood shopping centers.

According to the author . . . since the entertainment business . . . if it is to survive . . . must also go where its patrons are located, more and more theatres will be built in outlying areas . . . This inevitable trend . . . as surely as night follows day . . . spells the death of the downtown theatre . . . People will most assuredly attend theatres located near their homes . . . where plenty of free parking space is available . . . rather than buck traffic congestion to attend city houses.

The author of the following article . . . who carefully examines every cipher of "the handwriting on the wall" . . . gives the neighborhood theatreman some helpful advice on how he may best rule from his new position . . . on the throne of motion picture business . . . with regard to patron service, bookings, etc.

By Leo Yassenoff
F & Y Building Service (Theatre Division)
Columbus, Ohio

Downtown first-run theatres, as we think of them today, are doomed! The neighborhood theatre owner controls the entire future of exhibition in cities up to 600,000. Whether he takes advantage of the opportunity to become the real power in the motion picture business is entirely up to the individual. Yes, as we go into 1950 we are faced with a future marked by an increased emphasis on simplicity in design and construction, and, secondly, per our introduction, by radical departures in operational policies and procedures.

The motion picture theatre of today is a direct result of gradual changes, dating back, primarily, to the advent of sound pictures. This revolutionary step of the twenties, together with other equally startling developments, have all contributed to its advancement. But, the motivating force has always been the same, namely, a demand on the part of patrons for the ultimate in comfort and convenience, and, in recent years, an early opportunity to enjoy pictures in their own neighborhood theatres. Naturally, one must also take into proper account the technical advances made on the production side, the increased efficiency of distribution, and the advantages derived from contemporary exploitation, advertising and publicity.

Modern Theatre Requisites

Today's theatre must be designed to provide features in comfort undreamed of when the rococo palaces of the booming twenties were the vogue. Frills and bric-a-brac are being replaced with decorative and ornamental devices, substantial in character, and functional by reasons of design. It has always been a cardinal rule of our company to design theatres which, by the very nature of their construction, do not become dated in a comparatively short time. This precept automatically eliminates the fantastic, and the radical modernistic designs. We will always design theatres with what we consider an unmistakable F & Y label: simple grandeur, dignified glamour, roomy comfort, and technical perfection.

Comfort, convenience and service are factors deserving maximum consideration. To minimize their importance is to literally drive potential patrons away from our theatres—to television, to drive-ins, and to other media of entertainment where patron comfort is paramount. The theatre of today must go far beyond set rules and formats of the past. On occasion, even many state and municipal building codes must necessarily be improved, voluntarily, by designers. For example, the average clearance required by law between permanent seats is from 30 to 32 inches; in all of our planning we specify a minimum of 35 to 36 inches, deliberately sacrificing greater seats, numerically, to patron comfort and safety. Similar consideration must be given to all other matters related to the restrooms, health features, heating and cooling plants, sightlines, and acoustical treatments.

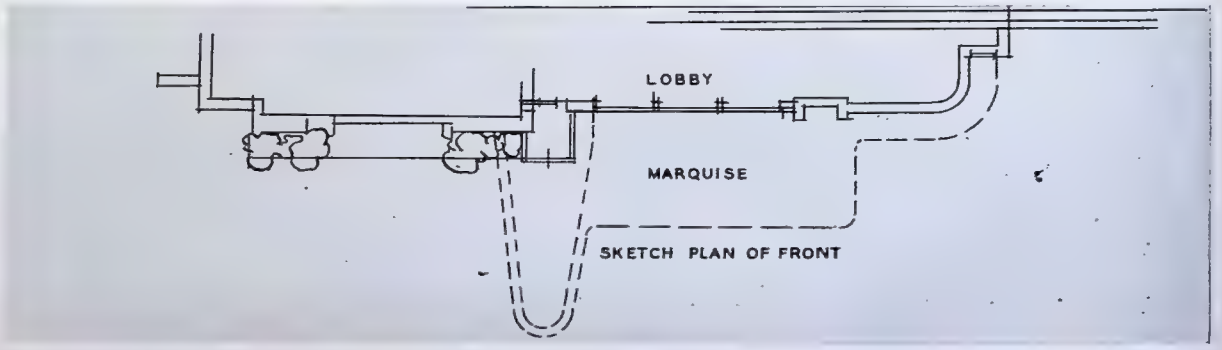
The Changing Face of Business

No special powers of insight are required to recognize the upheaval which is in the offing in the handling of first-run product. To a certain extent this trend is tied in with governmental action related to monopolies, anti-trust violations, and unfair restraint of trade. How-

NO DREAMER OF DREAMS, but a hard headed realist who has proved successfully the thinking behind his accompanying forecasts, is Leo Yassenoff (right) here pictured with his guest the Paramount featured player William "Bill" Demarest at the opening of the Lane Shopping Center and Theatre in Columbus, Ohio. Not only as a builder but as an exhibitor as well, Mr. Yassenoff's words may make fellow exhibitors scream with indignation,—but they won't forget them. He owns a circuit of 13 theatres.







SIMPLICITY DERIVED from an all-over pattern is exemplified by the use of a diaper in the Flemish bond brickwork above the canopy. The focal point is achieved by framing a comparatively plain surface (terra cotta, metal or glass) with a dark facing material (possibly granite). A study of numerous F & Y constructed theatres, as published in this current issue as well as in past issues of THEATRE CATALOG, will prove equally interesting.

ever, the real answer lies in the move of business generally from downtown districts to suburban and neighborhood locations. This particular condition alone, through a natural progression of events, will eventually be responsible for bringing us to the eve of the day when the neighborhood theatre replaces the downtown houses to be reckoned with by distribution. While it may be granted that governmental action has speeded the process, or at least opened the way, there could be, nonetheless, no future differing from present day conditions unless there was a sound, economic basis for looking upon the neighborhood exhibitor as the man of the hour.

The Downtown Parking Problem

Huge, complete, one-stop shopping centers can, and do, cater to every possible consumer need. Here definitely is a case of bringing the mountain to Mahomet. Lack of adequate parking facilities and unbelievable traffic congestion problems have tended to reduce the number of downtown shoppers. These items are so vital to centralized business interests that every day we read of schemes with a "Buck Rogers" twist being seriously considered as remedies. In Columbus the city planners have talked of bridging over a portion of the Scioto River in the downtown area, and/or mining out a tremendous sub-basement under the capitol building, a structure weighing thousands of tons, for parking garages. And in Pittsburgh they are discussing tearing down much of their famed Golden Triangle for parking lots.

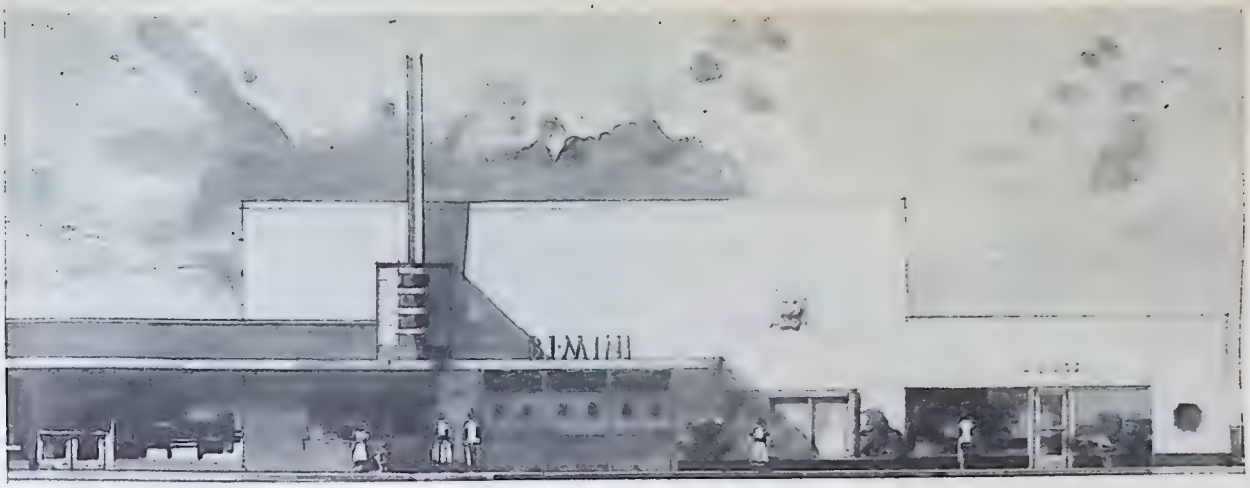
Higher Admissions in Centers

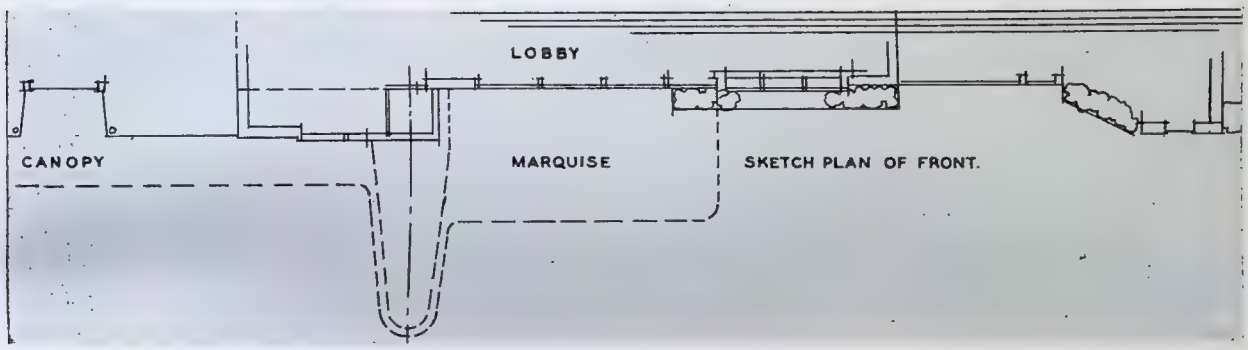
In strategic locales, fed by scientifically engineered traffic arteries, major shopping centers, with their vast areas of protected, free parking space, have been responsible for a complete change in buying habits. Such is the attraction and character of theatres in some of these centers that they are able to command premium admissions. The Valley Theatre, Cincinnati, which is a unit of the $1,500,000 Valley Shop-In Center, a project of F & Y, charges adults five cents more than any other local house with similar availabilities. And in Indianapolis, The Arlington, another F & Y theatre project, which is located in a community buying district, not a formal center, has upped all admissions 10 cents over direct competition. This decentralized buying trend is growing all the time, with more and more businesses either moving to the neighborhoods, or at least opening branches of major proportions. Therefore, it seems only logical to assume that the theatre, the same as other business, has a well defined future in the neighborhoods.

Neighborhoods and First-Runs

Through our Academy Theatre division we know that theatres other than downtown showcases can handle quite successfully first-run day-and-date bookings. We have experimented during the past three years with multiple first-runs, using five, six, seven and eight houses at a time. The results have been most gratifying, to our management and the distributors alike. Furthermore, our patrons have approved, as evidenced by their attendance, despite the spasmodic increases in admissions involved. It should be emphasized that not one of the pictures used, was top boxoffice, it was on par with, or under, the average product used normally by the second or carry-over houses downtown. Yet, our grosses in every instance were at a minimum, three times greater than those which would have resulted from playing time at the producer-owned move-over houses.

Now that the average buyer is transferring his interests, in a business sense, to the community shopping center near where he resides, it seems obvious that the motion picture industry should make every effort to cater to him on this basis. Due to the fact that so many cen-





HERE IS AN EXCELLENT EXAMPLE of extreme simplicity in front elevations. The charm lies in the simple mass above the canopy, broken only by the carved ornamental lion's head, and the vertical marquee-sign unit. The façade lends itself to stucco or some other plain facing material. The accompanying plan helps the reader to more closely follow the setbacks and protrusions of these proposed fronts from the drawing boards of F & Y.

ters are responsible for what amounts to unbelievable numbers of shoppers in a week's time (in practically any typical center the traffic flow looks like a cross between Saturday night in a farm community and a bargain basement sale), it should go without saying that a modern, service-minded theatre in the same vicinity as a good center should prosper. This has been our experience with the Lane, a 1,000-seat unit of the Academy Circuit located in The Lane Shopping Center, a $2,000,000 development of F & Y serving the northwest of Columbus. At this house our grosses have increased in direct proportion to the new traffic created and built up the adjacent stores and shops.

Multiple Bookings

Large neighborhood theatres alone could easily carry a first-run booking, if properly located in regard to traffic arteries. Smaller houses, in some instances, could take advantage of extended engagements to play off a first-run subject. But, without question, a multiple-booking setup could return far greater money to the distributors than any single house, whether situated in the downtown district or in a neighborhood location, and much faster also. In practically any metropolitan city it would be comparatively simple to secure a group of deluxe neighborhood houses, offering the ultimate in patron conveniences, which would offer more seats (all good) than the number available at any single theatre in the same locale. It is a foregone conclusion that, in nearly all of the downtown showcases built 20 odd years ago, there are 25 to 30% bad seats, due to high balconies or the wide angle of vision from the sides. No architect, it is to be admitted, can do much to improve such deficiencies. Only in a house under 1,500 seats can every patron be assured of perfect vision in all sections of the auditorium.

Conclusion

It is the firm conviction of the writer that the entire future of our motion picture business is in the hands of the neighborhood theatre owner and operator. Television is a serious problem, but it will never completely eliminate the theatre. The average person will never be satisfied with receiving all of his entertainment at home; on occasion he will venture away from his television set, and it will be necessary for the energetic, progressive exhibitor to "build a better mouse trap" to ensnare him. The exhibitor who ridicules television because of the poor quality of programs, and the reception in some areas, for that matter, is only assisting in the digging of his own grave.

In order to counteract the competition from television and other forms of entertainment directed at the masses, we must take advantage of every possible method of catering to patron comfort and convenience. By riding the "gravy train" of big business moving from downtown locations to the neighborhoods, the exhibitor of the future is in such a position today that he can almost write his own ticket. Distribution must recognize that in the year 1950 we are entering an era in which the neighborhood will be all-important, with consumer patronage of business located therein strictly the result of natural events. The downtown areas, true, will continue to be served with motion pictures. There will always be a demand for such theatres, on a much curtailed scale, from transients, convention visitors and the like. But, to our way of thinking, such theatres will be limited to 1,500 seats and play day and date with certain houses in key neighborhoods.

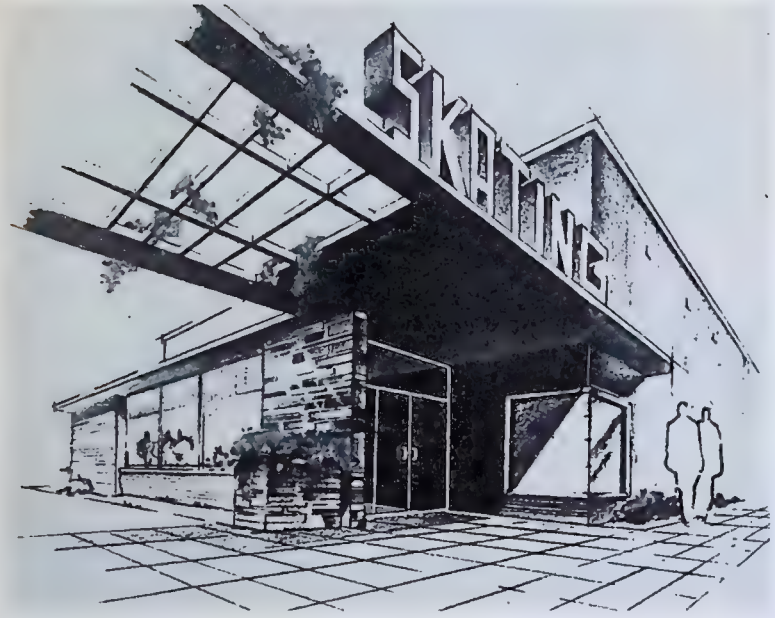
The new era is here and nothing can stop it. What are you going to do about it?

ABOUT THE AUTHOR

Leo Yassenoff, a veteran of 32 years in the construction field, heads F & Y Building Service, its Theatre Division, and the 14-unit Academy Theatre Circuit. His one son, Milton, manages the last named organization. He is a graduate of Ohio State University.

Entering An Era of Shopping-Recreation Centers

Rapp and Rapp Project Includes Drive-In, Indoor, and Other Amusements in Single Business District



A SKATING RINK for either ice or roller skating, bowling alleys, and billiards, is a big feature.

BRIEF: *A backward glance at two formerly designed community centers is a natural prelude to a discussion of the newest twist in this important field of commercial and recreational development . . . Here, for the first time, we find an ozoner and an enclosed house situated practically side by side . . . And, within a few feet of these two showplaces, everything from diapers to automobiles are there for your shopping convenience . . . All this in a single grand emporium . . . whose possibilities for future development are limited only by the architect's imagination.*

The collectivistic trend, which has marked the course of American life during the last half century particularly, has made deep inroads in the commercial field as well as in housing. The community shopping center, for example, has grown by leaps and bounds in popularity and practicality both. The obvious convenience of grouping a variety of commercial projects together as an entity has gained deserved recognition and acclaim from the U. S. shopper, who appreciates the lesser expenditure of time and effort involved in making his purchases in a single location, as compared with the annoyance and time wasted in traveling from one part of a community to another to reach stores carrying the items he wants.

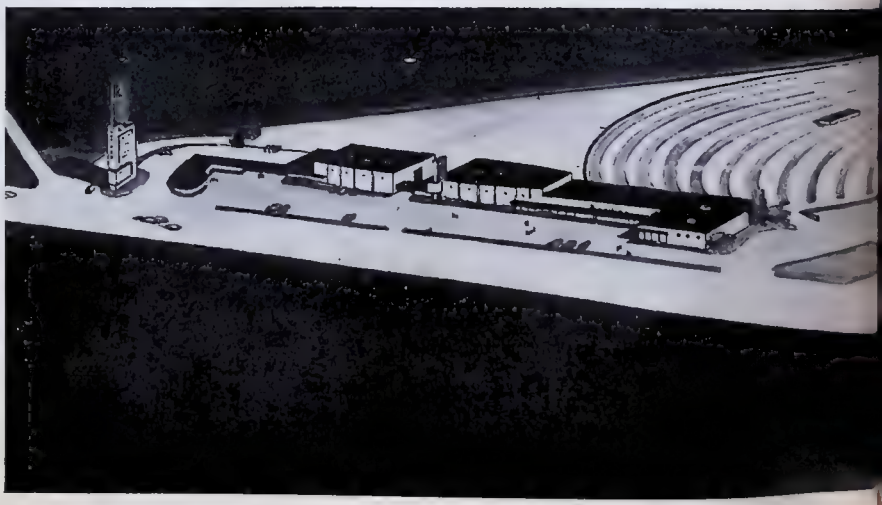
A predominantly important facet of the community shopping center development is the incorporation of amusement features, theatres in particular. The situation of entertainment facilities in the centers has proven beneficial to commercial enterprises, and vice versa. Theatre, ice rink, bowling alley, billiard parlor, and roller rink patrons are naturally drawn to stores in the area, while shoppers are prone to attend amusement enterprises before, after, or during the course of their errands.

Previously Reviewed Centers

In the 1946-47 Edition of THEATRE CATALOG (pp. 174-75), a discussion was presented on Navy Point, a multiple-enterprise center near Pensacola, Fla., which combined a variety of stores under one roof with a beautiful modern theatre situated near the super mart. Large paved and lighted areas adjacent to the theatre building provide ample parking space for both shoppers and theatre patrons.

A natural sequel to the account of the Navy Point center was included in the 1947-48 Edition of THEATRE CATALOG (pp. 516-517). This second project, destined for erection near State College, Pa., although still hanging in abeyance due to certain building difficulties, is an extremely ambitious undertaking. Designed by E. C. A. Bullock, the center will include a number of diversified stores connected by a covered arcade. A service station will also be erected to afford customers an opportunity to have their cars serviced while shopping.

A 1,000-seat theatre connected with the shopping arcade will be a focal point of the recreational facilities integrated into the center. Large parking areas have been provided in the plan to make available plenty of space for both theatre patrons' and shoppers' cars. It is felt that the theatre will play an important role in attracting patrons to shops remaining open in the evening, and vice versa.



One especially interesting aspect of this proposed center is the allocation of space for erection of a drive-in theatre as well, although it is not a definite part of the present construction scheme. Although it is believed that a drive-in would not offer a serious competitive threat to the indoor operation if the two were operated jointly from an overhead point of view, the principal reason for including it in the plan was to forestall the eventuality of a drive-in operated by outside interests being attracted to the area once the center was fully underway.

A large sports arena constitutes the other principal entertainment facility planned for this community center. Through use of a series of movable partitions, it will be possible to conduct several functions such as dancing, ice skating, basketball, and other sports simultaneously. Bowling alleys in the basement and concession stands will aid in boosting the arena income.

In order to obtain better operating efficiency, it is planned to put all units, including also a hotel and tourist cottages, under one management. A single hand at the helm of the center will, it is felt, further the anticipated way in which the various segments will aid one another in attracting business.

The Rapp and Rapp Project

This year, however, a further step in the design of community centers was taken by Rapp and Rapp, Chicago architects. The firm's project, as it now stands on the drawing boards, will have a frontage of approximately 2,000 feet along a main superhighway near a large mid-western city. Triangular in shape, the proposed center will embrace nearly 50 acres of land within its boundaries and will cost an estimated six to eight million dollars.

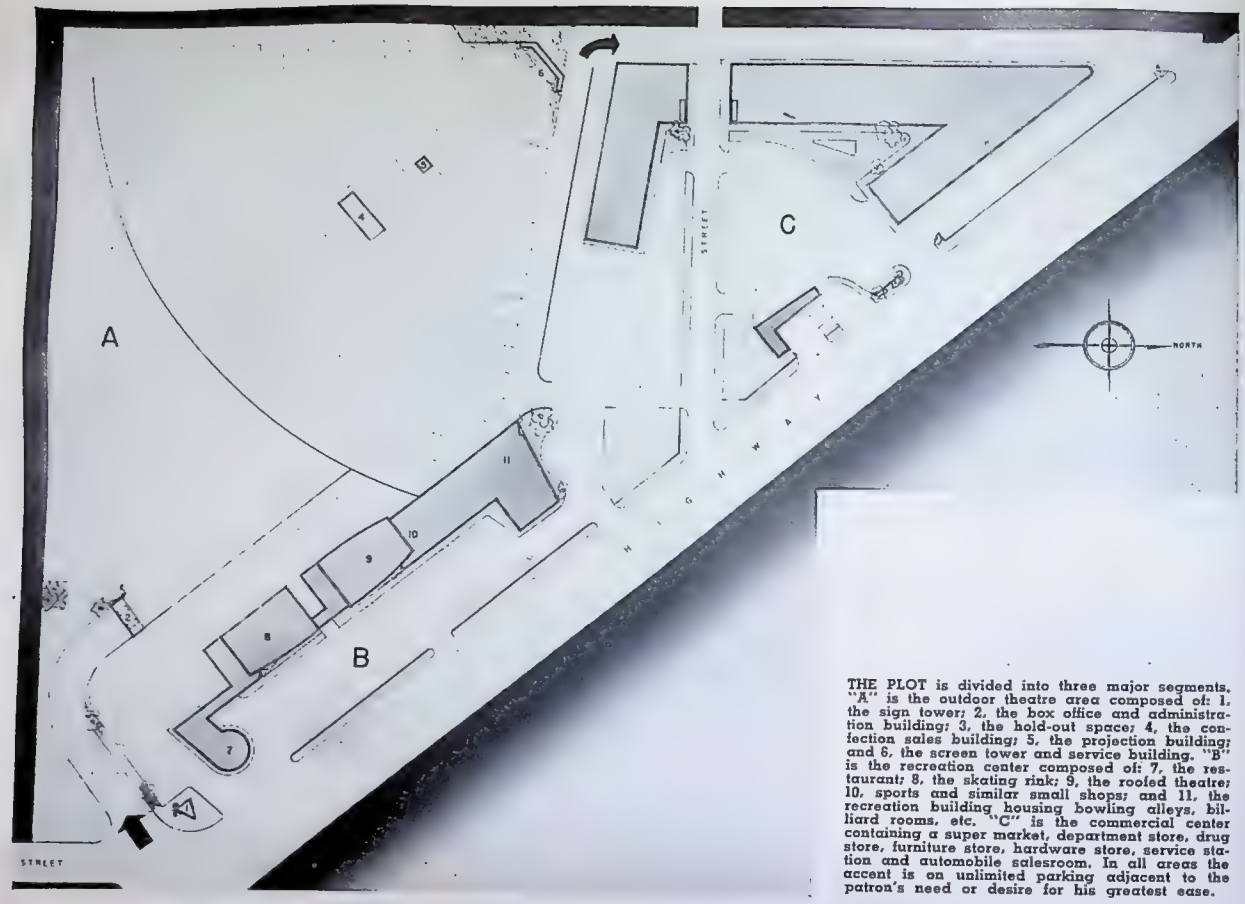
One of the most outstanding features of the new center is its inclusion of a drive-in as well as an indoor theatre. The drive-in will cover an area of approximately 15 acres and will operate throughout the year, except in the late fall, winter, and early spring. The indoor theatre will operate throughout the full twelve months for those who are not handicapped by children or prefer its facilities. The outdoor entrance gate will be located at the end of the project near the superhighway and a tributary street. Cars will pass by the theatre's sign tower on the way in along a 60-foot wide driveway curving to the right. The administration building will be built directly over the boxoffice at the end of the curved road. This location will permit the management to observe easily the number of cars entering the auditorium, together with those waiting in line. The 110-foot wide combined screen tower and service building will be set approximately 250 feet forward of the projection booth. The center of the audi-



SHOPPING FACILITIES of every nature will be provided by high quality modern stores flanked on all sides by ample parking space. Such stores have been known to attract patronage from as far as 25 miles, and usually return substantial rentals to the investor. Parking is the key to auto patronage.

A BIRD'S EYE VIEW of the proposed new combination Shopping-Entertainment Recreation Center as planned by Rapp and Rapp, Architects, of Chicago.





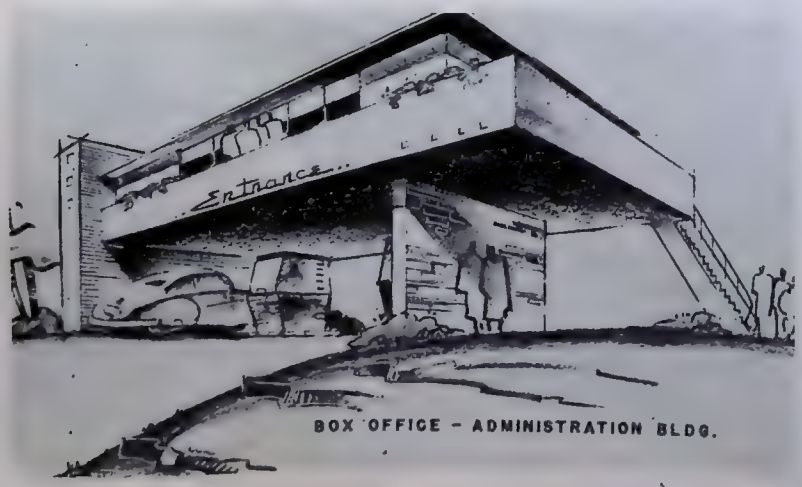
THE PLOT is divided into three major segments, "A" is the outdoor theatre area composed of: 1, the sign tower; 2, the box office and administration building; 3, the hold-out space; 4, the confection sales building; 5, the projection building; and 6, the screen tower and service building. "B" is the recreation center composed of: 7, the restaurant; 8, the skating rink; 9, the roofed theatre; 10, sports and similar small shops; and 11, the recreation building housing bowling alleys, billiard rooms, etc. "C" is the commercial center containing a super market, department store, drug store, furniture store, hardware store, service station and automobile salesroom. In all areas the accent is on unlimited parking adjacent to the patron's need or desire for his greatest ease.

torium will feature a concession building 30 by 80 feet.

The second large segment of the center will be devoted to a recreation area. Aside from the 1,000-seat indoor theatre, this section will include a rink which may be used for either ice or roller skating, as the situation requires, bowling alleys, and billiard rooms. The "extra profits" possibilities of the area have been given due attention with plans for a fully equipped restaurant. The eatery will be strategically located near the highway so that tourists, as well as patrons of the center, will be drawn to it.

Although a few stores will be situated in the recreation area, the vast majority will be erected in the commercial portion of the center. In addition to the mammoth super mart, there will be a department store, drug store, furniture store, hardware store, automobile agency, and service station. Thus in one central place the customer will be able to purchase all his necessities and have his car serviced at the same time. The service station and the super mart will operate on a 24-hour basis to serve customers at any time whatsoever, day or night.

THE ADMINISTRATION OFFICES are perched high over the boxoffices for advantageous control.



It goes almost without saying that before the first sketch of the new center was made, a painstakingly careful survey was taken of all factors to be considered. The investment which it represents required preliminary checking of the numbers, buying habits, preferences, and amusement tastes of the neighboring populace. The half million or so residents found to be living within a 10-mile radius of the center site represented a great deal of mass buying power, and the investors were, of course, anxious that their miniature city include within its boundaries everything that would attract the interest and purses of this formidable army of prospective customers.

The parking problem was another question whose various phases were carefully investigated before hand. In



THE SCREEN TOWER (above) is modern and contains in its base the needed service rooms. The sign tower (below) attractively dominates the highway.

consideration of parking areas for the amusement center, for example, lengthy consideration was given to establishing average means as to the parking proclivities of future customers. Since it was determined that there do exist distinct differences in the order in which various types of people are generally likely to enter stores, as well as in the times of day they are likely to do their shopping, the initial layout of the amusement section was determined on the basis of: what number of cars would be likely to enter the section during a typical day; at what hours during the course of the day; where the major part of the cars would park first; how long they would remain, and where they would proceed from there. This shrewd preliminary planning accounts for the differences in the amount of parking space around the various buildings.

Conclusion

The Rapp and Rapp project, although it embodies several new and unique developments in community center design, is actually just another progressive milestone along the road to commercial and recreational collectivism. The Navy Point and Bullock centers preceded the Rapp and Rapp project, and undoubtedly the future will bring other community centers, also revolutionary in their scopes and aspects.

Drive-in banks and restaurants, for example, have already mushroomed across the country, and it is not dangerous to conjecture that the next few years will see an increasing growth of entire drive-in shopping areas, encompassing 50 to over 100 stores within their borders. It is likely that these centers will be patterned in two long rows of stores with a department store and theatre at opposite ends and a landscaped mall in the center, where walkways and benches for shoppers will be found. These projects may well include also day nurseries where mothers may leave their children while they shop or take in a show, and professional people such as doctors may quite conceivably find these centers excellent sites for their offices. The shopping center of tomorrow will be, in truth, a shopper's paradise!



A Study of Existing Building Codes

A Simple Analysis of Writing, Enforcement, and Appeal Methods, Which Owners May Help to Better

By Henry Anderson
Chairman, Building Code Committee, Theatre Owners of America

BRIEF: *The words "building code" represent . . . to many theatremen . . . an ominous vagary, a sort of mysterious legal complexity . . . which must be obeyed, although it may not be fully understood . . . lest one run afoul of the authorities . . . Such codes, however, . . . as they govern construction, exits, seating, hardware, etc. . . . are vital to the public safety . . . There are definite reasons for their being . . . which should be appreciated by every theatre operator . . . As a matter of fact, codes are frequently designed to serve the best interests of management . . . as well as patrons . . . by protecting it from unfair competition on the part of houses with inferior construction and equipment.*

It is an admitted fact, though, that building codes have too long been enshrouded in mystery . . . so that their true nature and purposes have been concealed from view . . . In answer to this need for clarification, a noted authority on the subject has set forth below . . . in simple layman's language . . . a concise, informative explanation of the theoretical considerations involved in drawing up codes, the means by which they are carried out, ways of appeal, penalties for violations.

In analyzing the principal provisions of a typical code, the author is broad-minded enough to point out seeming deficiencies . . . which, he believes, may be corrected by more industry cooperation with authorities . . . Greater interest on the part of theatremen . . . in discussing their problems with local municipal building code committees . . . will result in more unified and equitable codes.

There is today a rapidly increasing activity in connection with building codes. New codes are being written, existing codes are being revised, and there is increasingly rigid enforcement.

The motion picture theatre is particularly affected by building codes, and it is important that theatre management be well informed and brought up to date on this subject. Since the industry has many occasions to deal with building code authorities, a clear understanding of the whole code process should be constructive and helpful.

A code-writing body is confronted with a serious responsibility, and its members very properly feel a high sense of duty. They divorce themselves from their own or their employer's or client's interests, and often, with little if any reward, unselfishly devote themselves to their task. This has been the background of many recent code-making bodies.

The easiest way to write a code would be to embody every possible theoretical standard. The code writer is familiar with these standards, but he knows that buildings cannot reasonably be made to comply with them, and that a code embodying them all would be difficult, if not impossible, to enforce; furthermore, they would have an unfavorable effect upon the development of the community.

The code writer's problem is one of comparison and relative value. He endeavors to find a practical, workable, reasonable middle ground. Among other things, he measures the hazard of the buildings which he is regulating against that of other buildings and against the general hazards of life.

People ride in automobiles, ships, trains, and aircraft; they engage in sports; they are pedestrians on the highways; they relax in the security of their own homes. It may come as a shock to learn that they are in greater danger in their homes than while in almost any other pursuit of life. They are safer in a plane than in an automobile.

Considering all of the hazards of life, the problem is just how restrictive it is reasonable to make the regulations under consideration. The code-maker must make the final decision, which is a difficult one. Good judgment and common sense provide the solution. In many instances there is no other guide.

The purposes of a code regulating places of public assembly are first to assure a proper degree of safety for the occupants, and second to provide that the building shall conform to the necessary fire-resistant construction standards of the community. In this regard a quotation from the code of the Building Officials Conference of America, now in preparation, reads as follows: "It was the thought of the Committee to fix the performance standards no more rigid than necessary to insure the fire safety of the occupants."

The National Board of Fire Underwriters in its introduction to the "National Building Code" states: "Building Codes must provide reasonable safety to the occupants, must preserve the property itself and must protect adjoining property as well as consider safety of the firemen." The motion picture theatre industry has certainly indicated in the past its complete sympathy with these objectives.

Recently Adopted Codes

A number of important new codes have recently been adopted or are in course of preparation, among them the following: 1949 edition of the National Building Code of the National Board of Fire Underwriters; New York State Standard Building Code for Places of Public Assembly; Buffalo, New York; Building Officials Conference of America, a national code; State of Virginia.

Economic Results

A newly adopted building code may have tremendous economic impacts. An overly restrictive code may be confiscatory of real estate values of business enterprises. The application of a code to an existing property may result in closing it down, or the cost of changes to comply with the code may be prohibitive and result in abandonment of the property.

A proper code is, however, protection against unscrupulous competition. The exhibitor who erects a safe building at high cost and operates it carefully should be protected against the competition of inferior construction and "fly-by-night" operation.

Cooperation of Code Authorities with Industry

There is an increasing tendency on the part of code-making authorities to confer with industry in the preparation of regulations. At times, code-making may be somewhat of a "star-chamber" process, but the more recent procedure is either to appoint representatives of industry to the board or for the board to consult with industry as to provisions affecting it, while the code is being written.

In any event, public hearings are held upon completion of the code, at which industry may make known its comments and objections. Often this time is almost too late. It is far more satisfactory if industry is represented during the writing of the code.

Unification of Codes

We wish that we could record a definite trend toward standardization or unification of codes. While there may be some tendency in this direction, there is no marked trend. For example; New York State, Chicago, Buffalo, N. Y., the State of Virginia, New York City, and a number of other bodies have just written or are writing new codes. They follow divergent patterns, and therefore, by no

ABOUT THE AUTHOR

Henry Anderson, a graduate in Mechanical Engineering and author of many articles on Theatre Fire and Accident Prevention, is associated with the following groups, in addition to his chairmanship of the Building Code Committee, Theatre Owners of America: Advisory Committee to New York State Department of Labor in the writing of a Code for Places of Public Assembly; Building Exits Code Committee, National Fire Protection Association; Theatre Engineering and Projection Practice Committees, Society of Motion Picture Engineers.

means, bring a Standard Code any nearer. In some localities two different codes, a municipal one and a state, for example, may apply and overlap.

On the other hand, there have been some recent meetings of representatives of code-making bodies for the purpose of standardizing codes. However, it will take years before the full effect of co-operation can be felt. A unified country-wide code would be most desirable. Construction would be standardized and stabilized. Architects would be able to develop uniform designs. Much waste would be eliminated and many economies effected.

Methods of Adopting Codes

Separate building codes written locally involve a long expensive process. It usually takes one or two years to write a new code. It is necessary then to publish the code in advance, hold public hearings, and so on. The cost usually runs into many thousands of dollars, and the results are often far from satisfactory.

The more effective method is to adopt an existing code by reference. This means that the municipality passes a suitable ordinance under which, for example, the National Building Code of the National Board of Fire Underwriters becomes the code of the municipality. This code has been adopted by a large number of communities.

Performance vs. Specifications

Many of the older codes incorporate detailed specifications covering the types of material, thickness, etc. of such things as walls or enclosures. They may prescribe, for example, that only metal lath and plaster shall be used for a certain type of enclosure.

The progressive code prescribes that the construction shall meet certain performance tests. The enclosure is required to be of such construction that it will, for example, resist passage of fire for one hour, or for four hours, but the material is not prescribed. This factor encourages the development of new and better materials and methods, and tends to avoid monopolies in materials or methods of construction.

General vs. Specific Codes

In writing a code, the problem arises as to the detail in which it is to be written. At one extreme is a code which endeavors to cover almost every variation and contingency. Every device and every detail of construction is set out, and there is little opportunity for modification or deviation. At the other extreme is a code which covers principles, and depends upon the enforcing authority for interpretation and modification.

Somewhere between the two lies the happy medium, and the problem is to decide just where.

In the Foreword to the National Building Code there appears the following: "In the preparation of this code the principle has been followed that . . . the requirements and restrictions relating to building construction should be stated in as broad terms as consistent with the attainment of public safety, . . . The code does not attempt in most cases to dictate materials . . . but rather to specify performance requirements."

The code writing authority must further decide the extent to which latitude may be granted in enforcement. If no flexibility is provided for, hardship results, and enforcement becomes difficult. If there is too much flexibility, obvious evils may result.

Retroactive Provisions

Newly adopted codes, as a rule, prescribe that certain provisions shall be retroactive, thus applying to all existing buildings, and that other provisions shall apply only to new construction.

In a number of codes it is very difficult to determine just which sections apply to existing and which to new construction. The new New York State Code is written in two separate sections, one applying to existing and the other to new Places of Public Assembly. This is an ideal arrangement.

Alterations, Additions, and Repairs

Some codes permit existing structures to be operated as heretofore, but require that upon the making of extensive alterations or enlarging the capacity, the structure shall comply with the codes for new theatres. While this may involve hardship, it is necessary that existing structures, which violate the code, shall not enjoy perpetual immunity from code requirements.

Enforcement Powers: Violations

There are various plans for enforcement of codes. In the National Building Code, the Building Official is charged with enforcement of the code, including issuing permits, making inspections, removing illegal or unsafe conditions, and so on.

Violation of provisions of the code constitutes a misdemeanor and is punishable by a fine of not less than $10 nor more than $100, or by imprisonment not exceeding 6 months, or by both such fine and imprisonment.

While codes usually provide certain penalties or fines, or for withdrawal of license to operate, in case of violation of the provisions of the code, there is an additional factor which is important to management. If an accident occurs in a theatre, due to a condition which is a violation of the applicable code, the violation may be an important factor in placing liability upon the operator for the results of the accident.

At the same time, this further principle should be made very clear. In the case of operation of places of public assembly, unusual care is required. It is not sufficient to show mere compliance with the law or with the code. Unusual or extraordinary care, far beyond the requirements of the code, may be necessary in order to discharge responsibility and avoid liability.

Board of Appeals

There must be some mechanism providing for relief, in particular instances, from provisions of the code which involve undue and unnecessary hardship. Often the Building Official or other enforcement authority is given little or no discretion as to modifying the application of the code.

As a typical arrangement we refer again to the code of the National Board of Fire Underwriters which provides for the appointment of a Board of Appeals, consisting of five members, who are qualified by experience and training to pass upon matters pertaining to building construction. Hearings of the Board shall be public. Any person may take an appeal to the Board of Appeals from any decision of the Building Official. The Board of Appeals may vary the application of any provision of the code. Appeals from the decisions of the Board of Appeals may be made by applying to the appropriate court.

Overlapping of Functions

In many communities there is an overlapping of functions of various departments. A theatre may be under the jurisdiction of the Building Department, the Fire Department, the Health Department, the Zoning Commission, and others. Unless there is co-operation among the departments concerned and a clear definition of authority, the property owner is seriously handicapped by numerous and conflicting orders.

It is entirely within the rights of members of the community who are harmed by a situation such as this to bring it to light and use their efforts to remedy it, and this the local theatre group might well do.

Safety of Theatres

The modern motion picture theatre still carries much of the burden of the old legitimate theatre where highly inflammable scenery on the stage was actually a menace to the audience. Today, of course, in legitimate theatres, scenery, curtains, and draperies are effectively flameproofed, automatic sprinklers are installed throughout stage section, and there is an effective asbestos curtain.

In the motion picture theatre there is a minimum of scenery and draperies, and these are required to be so flameproofed that spread of fire in them is not possible. The projection room or booth is so constructed that a film fire can completely burn itself out in the booth with practically no probability that it will spread beyond the booth. With the advent of safety film, the fire hazard will be eliminated.

A motion picture theatre building contains proportionately less combustible material than almost any other type of building. We can think of few types of occupancy where there are fewer inherent causes of fire, and yet there is no other type of business which is so closely regulated by law, and subject to such constant inspection and supervision by various authorities. It is, nonetheless, true that a person is safer in a theatre than in almost any other pursuit of life; certainly far safer than he is in his home, in his automobile, on the highway or in many other activities.

Exit Width

Several codes provide for 22 inches of exit width per 100 persons and are based upon the following facts:

The width required for a single file of persons to move freely is 22 inches. Such a file can readily pass any given point, such as a doorway, at the rate of one

person a second, or sixty persons a minute. 100 persons can, therefore, pass through the doorway in 1 minute and 40 seconds. Thus, a theatre complying with this requirement should, under reasonably favorable conditions, be emptied in less than two minutes, or if half of the exits were blocked, it could be emptied in less than four minutes.

This requirement is reasonable, and it is gratifying to feel that an audience may be exited so quickly. It points to the fact that, as to safety of the audience, we are interested principally in the first few minutes of the fire. From then on the problem becomes one of damage to property only.

Stage Performances

A number of theatre codes classify theatres based upon the nature of stage performances held, or upon the kind of stage. At one extreme, we have the straight motion picture theatre without stage or platform and, at the other extreme, the theatre equipped with full stage suitable for dramatic or operatic performances.

Codes have defined the dividing point between different classifications with varying degrees of success. It is very difficult to define exactly what constitutes a stage and what constitutes a stage performance. Does the appearance of a soloist on the stage change the classification? If not, does a quartette do so? If not, does a stage hand, and so on.

Exit Facilities: Seats

Places of Assembly with fixed seats, such as motion picture theatres, provide the greatest safety. Fixed seats guide the assemblage to aisles and prevent blocking of aisles and exits.

In places with loose seats, particularly when fastened together in banks, the seats, immediately upon occurrence of an emergency, may be thrown into disorder and seriously impede progress or block exits. The same thing is true of an assembly gathered about tables and chairs. An unseated assembly may be worst of all, because the possibility of a simultaneous rush to the exits.

Interior vs. Exterior Stairways

In some recent deliberations it has been proposed that outside stairways or fire escapes be prohibited. While we hold no brief for some of the older types of outside fire escapes, and ladders, we believe that, for theatre emergency exit purposes, a well-constructed metal stairway with standard treads and risers, installed on the outside of a theatre, is in most respects preferable to an enclosed stairway.

Emergency Lighting Systems

Modern codes provide for a reserve lighting system for use in case of failure of the normal lighting system. This equipment may mean a separate additional system of wiring and lights, or a reserve source of electrical power, or both.

Here there is a field for research to develop improved systems. Surprisingly satisfactory illumination of an auditorium can be obtained by means of only a few flood lights operated by storage batteries and strategically placed, either located at the booth and directed on the screen, where reflected light produces the illumination, or by lights located on stage and at other suitable points.

Exit Lights

Exit lights and signs are required by all codes, and a secondary source of current supply is usually necessary. Size of letters, color, degree of illumination, current supply, etc., are prescribed.

Usually the required candle power of lights in exit signs is unnecessarily high, and again, research should result in a reasonable standard on which there could be general agreement.

It is often proposed that green be substituted for red in exit lights, inasmuch as green denotes safety. People have, however, become so accustomed to red lights on exits that it seems dangerous to make the change to green.

Doors

The permissible width of exit doors is usually a minimum of 36 inches and a maximum of 44 inches. Obviously, doors are required to swing outward, or in the direction of exit travel. They are required to be equipped, except for the main entrance doors, with panic-type hardware.

Lighting Standards

Codes usually provide for certain standards of illumination. There is one standard for the auditorium and another for passageways and other exitways. There is a wide discrepancy in the degree of illumination required by different codes, most codes requiring unnecessary brightness.

There is in this field an opportunity for theatre operators by suitable research to determine the necessary standards of brightness in foot-candles in various parts of the theatre. This research should also extend to uniform distribution of light, particularly on stairways of steps, effect of color, both in carpets and lights, and many other technical questions connected with illumination.

Fireproof Construction vs. Fire Resistance

There are two factors which may determine the necessary degree of fire-resistant construction for a motion picture theatre.

The first is its part in the community. If all buildings in a certain zone are required by the code to meet certain fire-resistant standards, in order to prevent conflagration, then, of course, the theatre building should conform to these general standards.

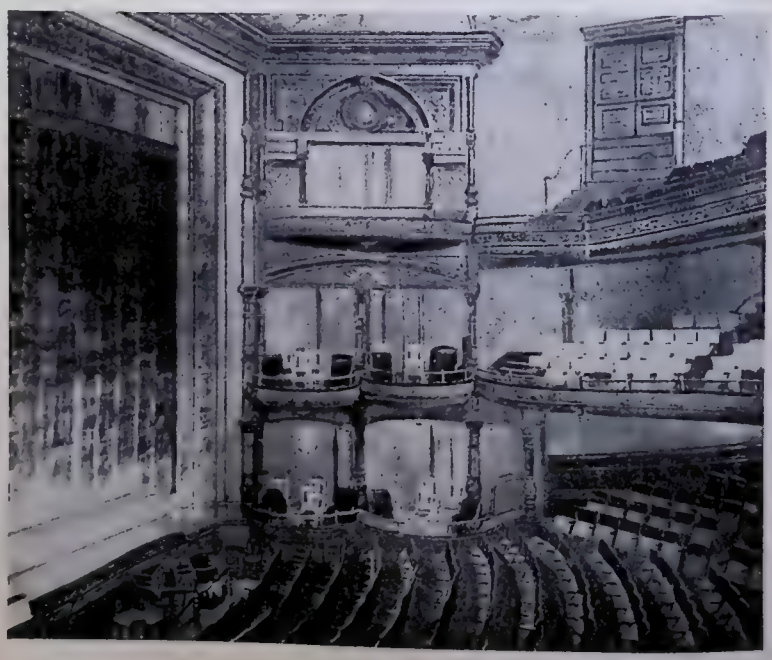
From the viewpoint of safety to life alone it is not necessary that the building be of fireproof construction. We have shown elsewhere that the theatre may be exited in a few minutes, and, therefore, whether the building is of one-hour, two-hour or three-hour construction has no significance.

Research

Many provisions of existing codes are, as we have shown, based upon tradition. They are carried along from one code to another and have never actually been no data upon which it can justify them, tested. The code-making authority has and the theatre operator has no data with which he can, if necessary, contest them.

It would be most desirable for the industry to do a certain amount of research and carry out extensive tests and experiments to determine the necessity for, or the effectiveness of, certain provisions, the value of which is in doubt.

BUILDING CODES that applied to the construction of the Tremont, Boston, Mass., in 1889, could not pre-conceive the advancements in building technique and fireproof materials that would take place during the ensuing 60-odd years. Unfortunately some of these same codes with only slight modifications are in existence today. *(Photo courtesy of William Riseman Associates)*



1949-50 Review of New Theatre Construction

Pictorially Surveying the Design and Structural Trends in Recently Opened Selected Theatres

BRIEF: *Probably the most outstanding continuing feature of each of the eight annual editions of THEATRE CATALOG . . . and the one that has attracted most international attention from theatre owners, architects, builders, and financial institutions . . . is this carefully selected annual cross-section of the past year's theatre construction. . . . Here were presented for the first time . . . and in a capsule detail form . . . many theatres of all sizes, designs and materials, never appearing in any other industry periodical. . . . Where pictures were not available from architects or owners, and the theatre was considered sufficiently important . . . THEATRE CATALOG was not loath to retain a photographer and shoot its own copyrighted set. . . . The honor accorded such theatre presentations encouraged other architects and owners to shoot theirs. . . . And, as a result, a trade press that had given only sparse attention to the use of photographs, blossomed forth with abundance. . . . Such is the mark of the ensuing pictorial survey on the industry at large. . . . It is the theatre industry's standard.*

The construction of nearly 1,000 drive-in theatres during 1949 and early 1950 did much to distract attention from the fact that a very healthy roofed theatre building program was also taking place. During this approximately same time, records in the editorial offices reflect completely new construction, or major remodeling that was tantamount to new construction, of nearly 450 orthodox theatres.

Quality of this latter construction was higher than it had ever averaged since World War II, with every indication being shown that scarcity of materials and prohibitive prices had eased to the place where architect and owner could freely interpret their plans and desires.

Shopping Center Theatres

Probably of greatest interest in this construction and in plans announced for the future, is the incorporating of theatres into the Shopping Centers which promise to dot the suburban areas of all large and medium sized cities. Referred to elsewhere in this edition by Mr. Yassenoff, the Valley, Cincinnati, Ohio is a typical example of such development that is delineated on the pages that follow. The City Line Center, Philadelphia Pa., and the Flower, Takoma Park, Md., are other examples.

In all cases the Shopping Center is designed around the patron's use of an automobile as his common means of transportation, so that accessibility of traffic arteries, and parking spaces close to good supply sources, are the keys to success. All of these more or less guarantee the success also, of a theatre that forms a component part of a successful center.

Interesting Materials

Also noticeable is a stepped up use of Lamella Roofs, laminated wood arches and quonset arches in the smaller theatres where economies were important. These and many other products have been proved to be quite adequate to modern theatre needs; and in the case of the arches, to lend themselves to many interesting interiors.

Wallpapers, wall tile, interior stone, several new acoustical tiles, glass, and new uses of rubber, are also continuing to expand the field of finishing materials.

Interesting Equipment

Escalators to encourage balcony use, turnstiles at the boxoffices, unit air conditioning, particularly comfortable seating, and great accent on the equipment of the lounge and toilet rooms, are a few of the many new innovations or expanding appurtenances noticeable in these newer theatres. Projection and sound have also received their share of attention through water-cooled and air-cooled lamps, several new and larger lenses, and a number of newly designed screen materials and surfaces.

Progress

In many ways the theatres of 1949-50 as delineated on the pages that follow mark a continuing progress. It is noticeable that designs are not as hide-bound to tradition, or as much prone to over ornament in an effort to awe and impress the casual patron. Plans are more functional and greater emphasis has been laid on safety, lighting, comfort and the perfect presentation of the entertainment. And the theatre as a whole is drawing closer to the tastes and needs of its patrons, rather than to the old effort to "wow" him with gigantic rococo ornamentation and objects d'art.

1949-50 has shown progress, and in a world of modern homes, modern conveniences, television, radio, etc., this progress may be the needed ingredient to keep the theatre industry in its dominant entertainment position.

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VALLEY •

Cincinnati, Ohio

The Shopping Center, of which the Valley is a focal point and important facet, represents an investment of $1,-500,000 and occupies seven acres of land, with a considerable part devoted to parking areas.

Mutually supporting and benefiting from the whole, the Valley is a first-subsequent run charging 50 cents for adult admissions, which is claimed to be five cents higher than other theatres in the area enjoying the same run. Construction is of steel, concrete, and brick with a metal deck roof.

Maroon terra cotta, with buff and blue inserts, and light colored face brick, set off by a three foot wide chocolate colored brick band around the lower portion, produce an effective front. Box-office is in chocolate colored brick.

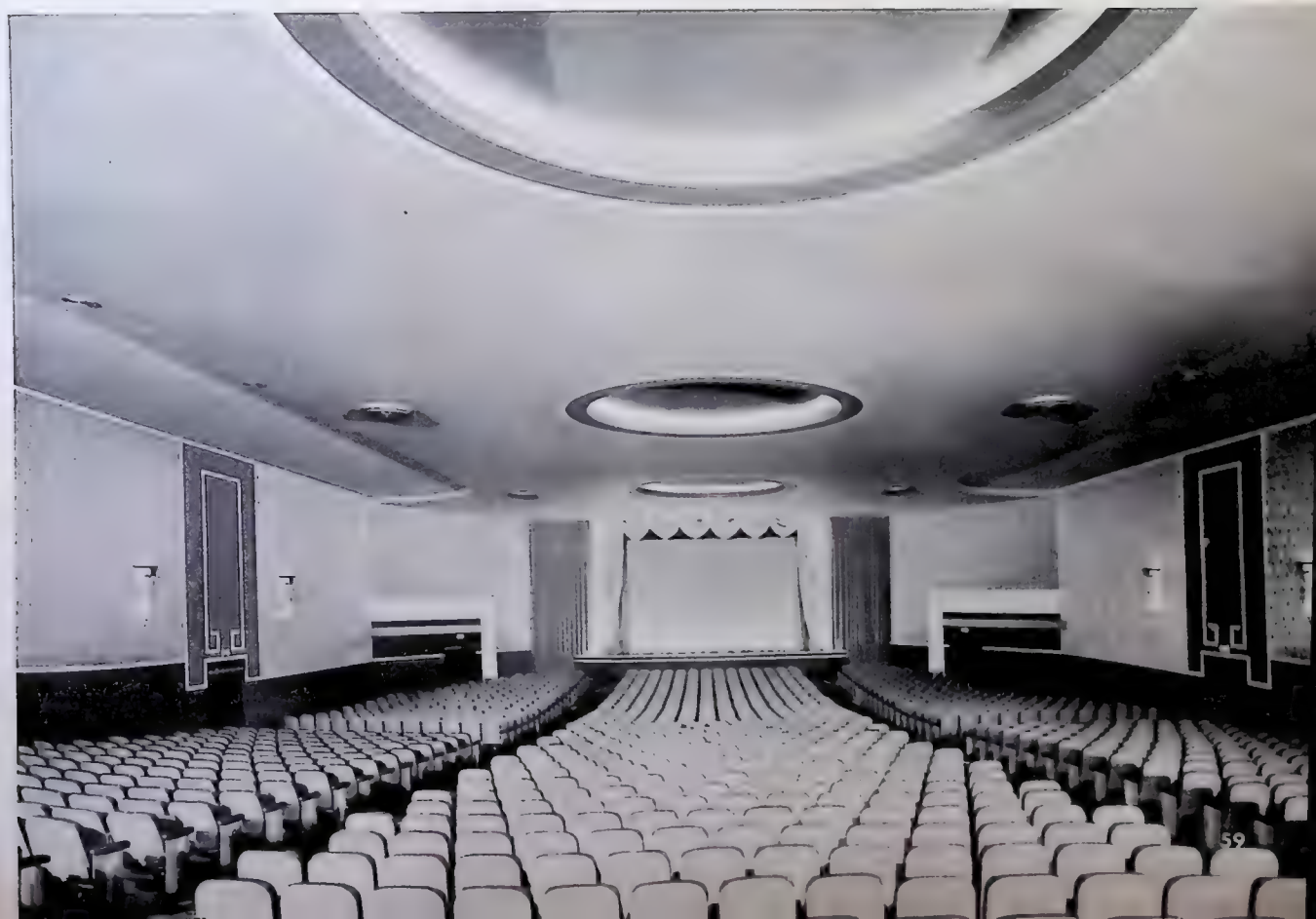
Dominant note of the interior is the simple grandeur of spaciousness and comfort, with the major decorative attention being given to the lobby, foyer and lounge rooms. The auditorium walls are a series of panels alternately covered with a gold figured damask and a green velour with decorative trim in white painted wood. Three circular wells containing indirect neon tube lighting dominate the ceiling.

An organ has been installed for special events and the general character of the theatre is such that increased prices for special bookings can be charged as desired.





ACCENT ON COMFORT THROUGH 1,500 UPHOLSTERED PUSH-BACK CHAIRS ON ONE FLOOR AND MODERN AIR CONDITIONING AND LIGHTING.



LARGE FIGURED CARPETS form an ornamental base for the severely modern furniture and indirect lighted dropped ceiling of the foyer. Double drinking fountains are built into a floral set. The lobby is wide and well lighted.

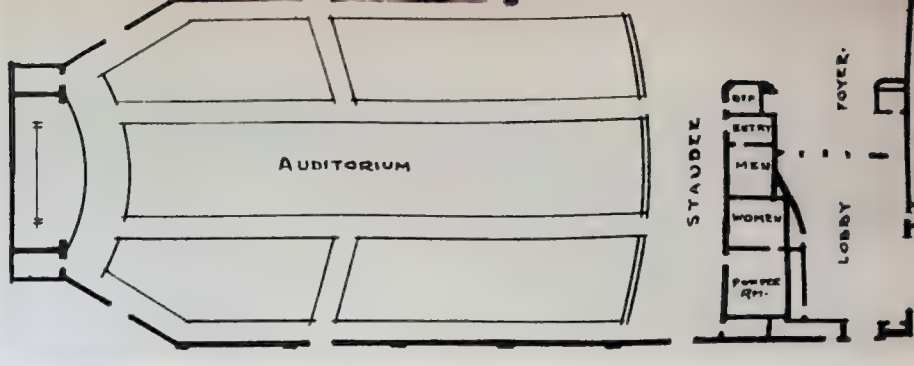




REFERENCE DATA

OWNER & OPERATOR: Louis Wiethe.
OPERATOR: F & Y Building Service.
SEATING CAPACITY: 1,500.
COST OF BUILDING: $275,000.
COST OF EQUIPMENT (including air conditioning): $72,000.

Acoustical Material: Zonolite.
Air Conditioning: General Refrigeration.
Carpets: Mohawk Carpet Co., deluxe Wilton.
Chairs: Kroehler Mfg. Co. Push-Back.
Curtain Controls & Track: Knoxville Scenic Studios.
Decorator: F & Y Building Service.
Draperies & Stage Curtains: Knoxville Scenic Studios.
Generators: RCA Century.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: RCA Brenkert Enarc.
Projection Machines: RCA Brenkert BX "80".
Rewinders: GoldE Mfg. Co.
Rubber Mats: Perfo Mat & Rubber Co.
Screen: RCA.
Sign & Marquee: Jack Quehl Sign Co.
Sign Letters: Adler Silhouette Letter Co. 10" & 18" Plastic.
Sound: RCA.
Supply Dealer: Midwest Theatre Supply Co.
Ticket Issuing Machine: General Register Corp.
Ticket Chopper: General Register Corp.
Wall Fabrics: F & Y Building Service.





AN UNUSUAL CONFECTION STAND raises on legs to permit easy access to cleaning. The ladies' lounge is as smartly modern as a Fifth Avenue shop, and uses decorative wall papers and modern furniture to good advantage.







SOUTHSIDE •

Los Angeles, Calif.

The new 1,466-seat Southside is designed to cater to a middle-class area with a seven-day subsequent run and at an admission scale of 80 cents for adults, 50 cents for juniors, and 20 cents for children. Therefore it was desired to accomplish a theatre that was imposing enough to command respect and efficient enough to operate economically.

Designed around the use of a Lamella timber roof lined with asbestos limpet on gypsum board, this large theatre follows a construction principle that has become very popular on the West Coast. The bearing walls are buttressed concrete with brick masonry fillers.

The lobby has a chartreuse ceiling with walls of chocolate brown and deep green. Carpeting is in a philodendron pattern carried out in beige and maroon, and all lighting is indirect.

Walls of the auditorium are blue green with large philodendron leaves and the ceiling is gold. The proscenium wall is draped from side to side with coral festoons and chartreuse hangings. The traveler curtain is yellow. Lighting is through indirect lighted central ceiling coves and side coves.

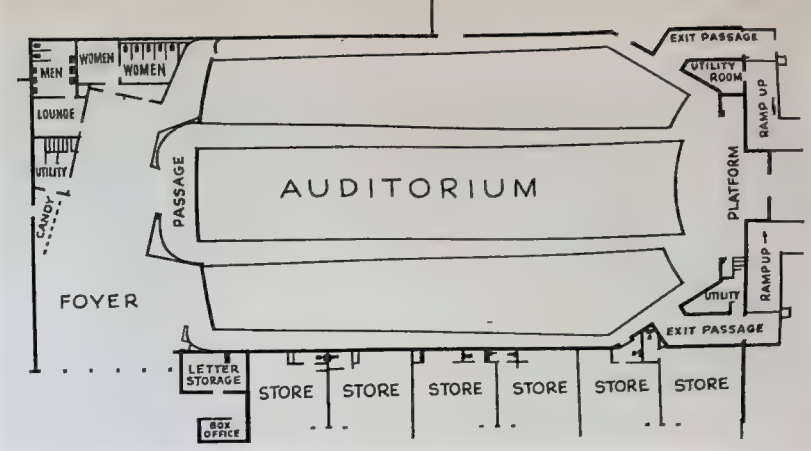
The ladies' lounge is particularly attractive with silver foil paper covered walls adorned with black and red butterflies.

An edge-lighted light trap mural depicts a conventional motion picture studio theme.

REFERENCE DATA

OWNER: Southside Theatres, Inc.
OPERATOR: Franchon & Marco.
ARCHITECT: Clarence V. Smale.
SEATING CAPACITY: 1,466.
COST OF BUILDING: $185,000.
COST OF EQUIPMENT (including air conditioning): $100,000.

Carpets: Alexander Smith & Sons Carpet Co.
Chairs: American Seating Co.
Changeovers: Weaver Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Display Frames: Theatre Specialties, Inc.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Rectifiers: McColpin-Christie Corp., Ltd.
Rewinders: GoldE Mfg. Co.
Screen: Walker-American Corp.
Sign Letters: Theatre Specialties, Inc., 10" Red, 17" Blue Bevelite.
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp.





THE PHILODENDRON THEME is naturalized through the use of a living bed of interior growing plants in the spacious lobby. Confection vending facilities to meet modern demands. The auditorium is highly ornamental due to the elaborate and generous festoon draperies and the large figured patterns on the side walls.





BEVERLY •

Bridgeport, Conn.

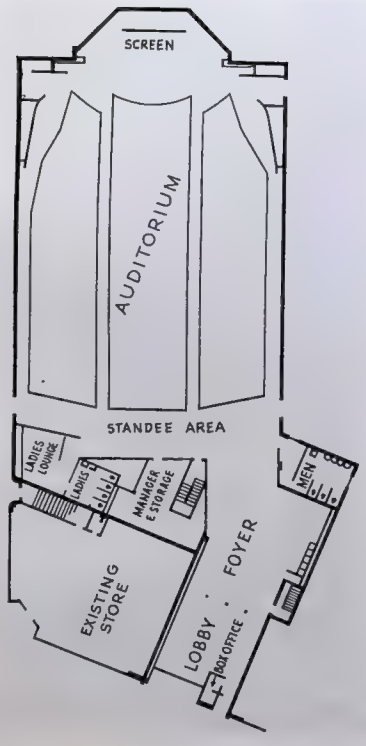
Perakos Associates wanted a new theatre to serve a preponderantly suburban drawing area of 40,000 with a run of pictures 30 days after downtown—but for a 50 cent top admission. A quality structure was mandatory.

Front of the Beverly was carried out in black granite and field stone with a white metal marquee soffit. Boxoffice has a gray terrazzo bulkhead, and the inner doors are red Formica, with the outer ones aluminite metal and structural glass.

The entrance lobby and foyer have white plaster ceilings, and walls of field stone, redwood siding, birch flexwood and blue kalistron. Built-in confection stand is effectively spotlighted, with other lighting from table lamps, and with ceiling downlights over the traffic areas. Carpeting is large figured and installed wall-to-wall.

Auditorium treatment is a series of architectural planes without figured ornamentation, and the dominant colors are blue and gray. Accent is on dignified comfort.

Lounge and toilet rooms are in keeping with the demands of the clientele and have plain broadloom wall-to-wall carpeting. This is a quality theatre for a family clientele.



REFERENCE DATA

OWNER & OPERATOR: Perakos Associates.
DESIGNER: William Riseman Associates.
SEATING CAPACITY: 978.
COST OF BUILDING: $175,000.
COST OF EQUIPMENT: $60,000.

Acoustical Material: Rockwool, Plaster.
Air Conditioning: General Electric.
Carpets: Alexander Smith & Sons Carpet Co.
Chairs: Kroehler Mfg. Co.
Changeovers: Weaver Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Curtain Controls & Track: Vallen, Inc.
Decorator: William Riseman Associates.
Draperies & Stage Curtains: Joseph Dobesch.
Generators: Hertner Electric Co.
Lenses: Kollmorgen Optical Corp.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless.
Projection Machines: International Projector Corp. Simplex E-7.
Screen: Walker-American Corp. Plastic.
Sign Letters: Wagner Sign Service, Inc.
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.

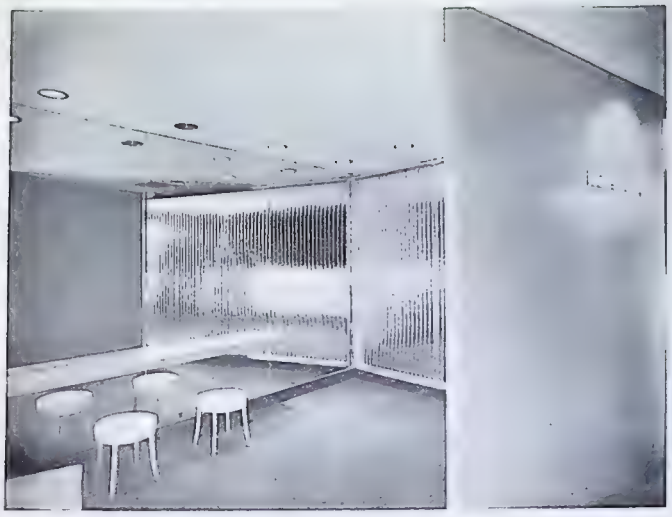


UNUSUAL LIGHTING is gained from ceiling downlights alone, with the exception of the foyer where reflected light helps.

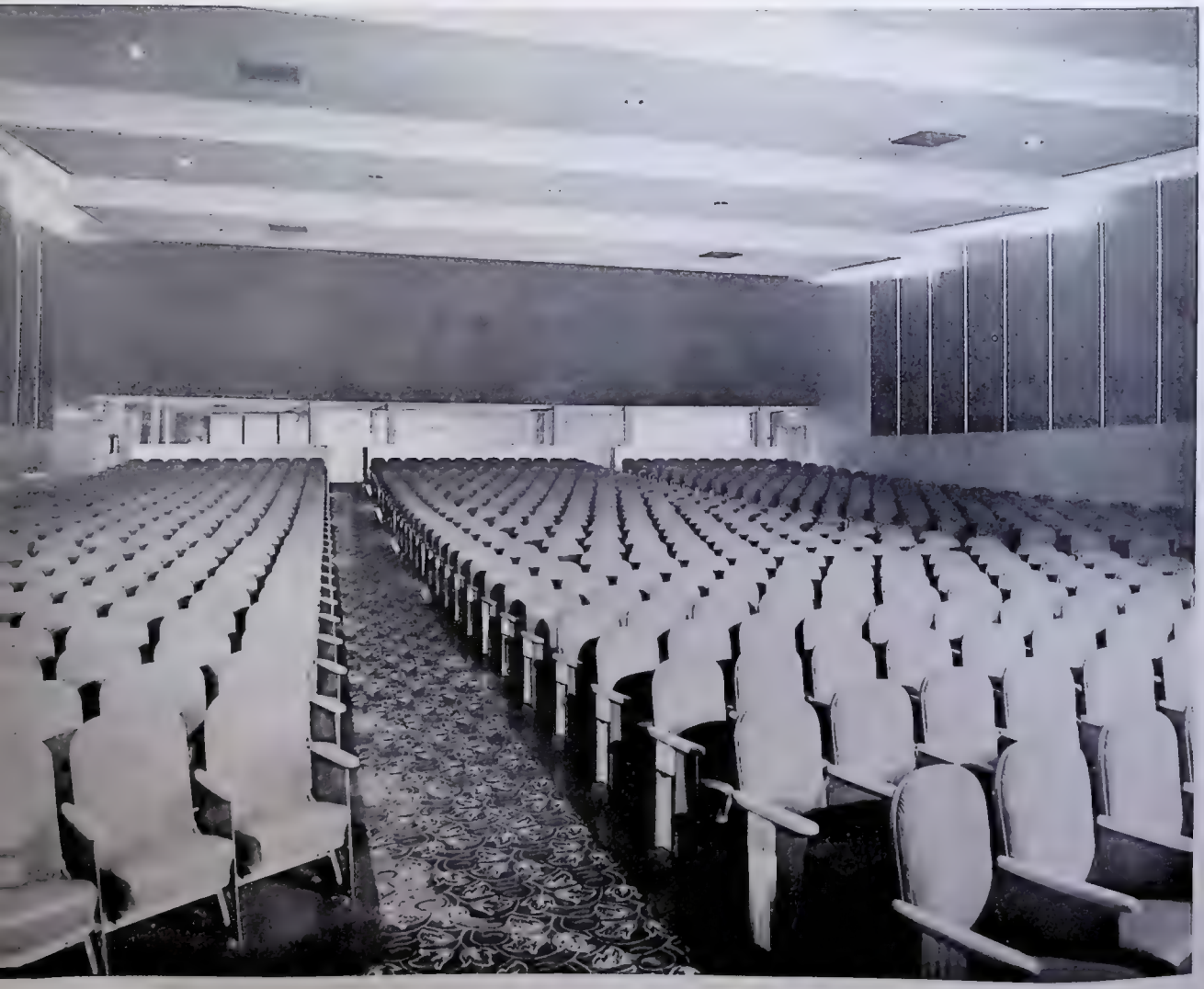


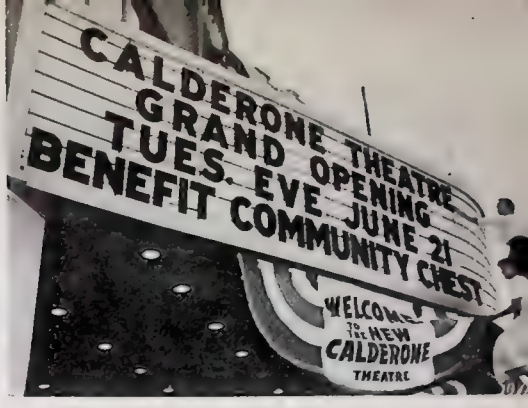


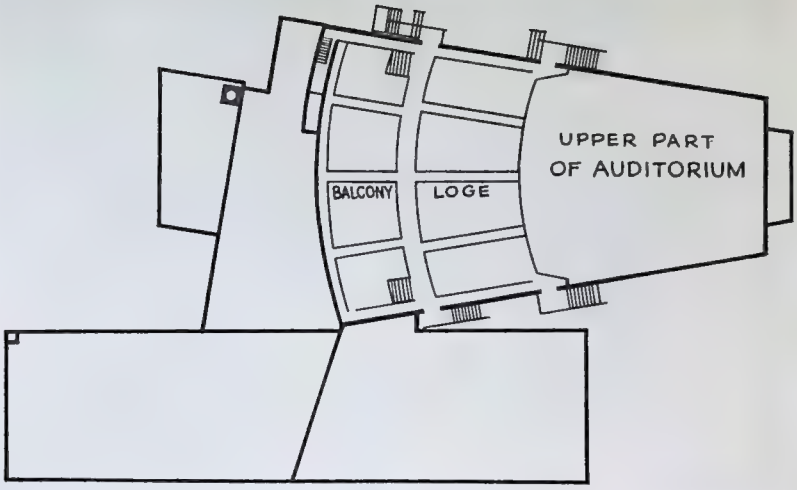


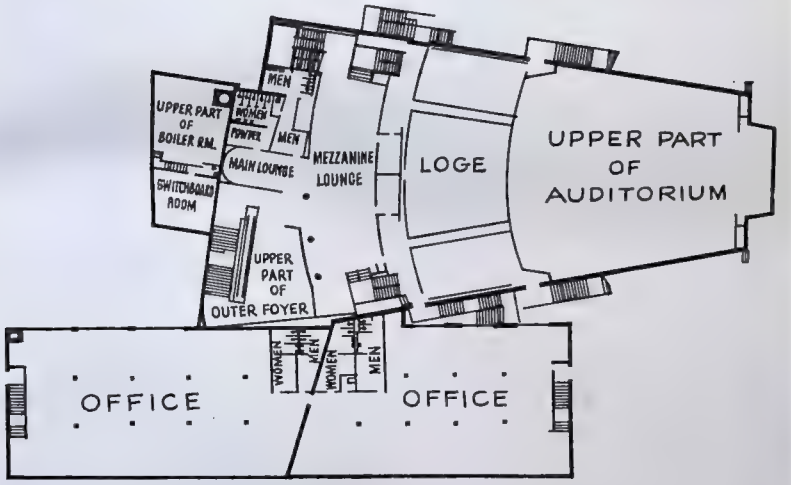


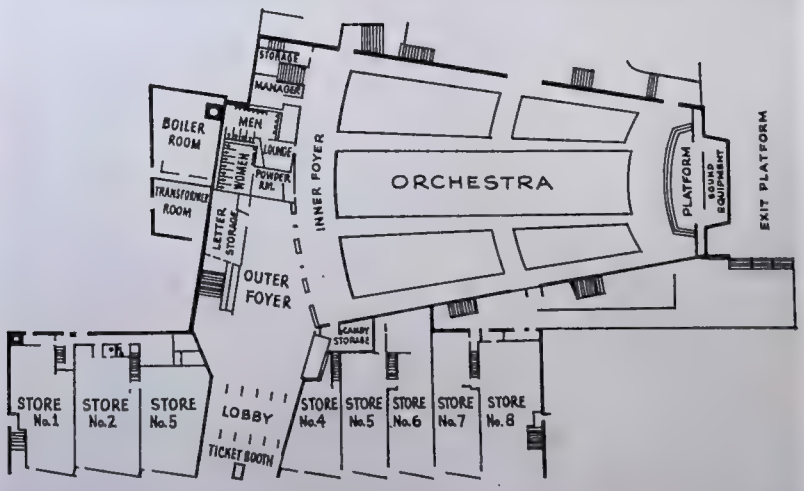
SIMPLICITY and the use of light to spot facilities and surrounding areas, is a dominant note throughout the functional design of the Beverly, Bridgeport, Conn.











CALDERONE •

Hempstead, L. I., N. Y.

Large, well-constructed, and beautifully equipped, at the Calderone there was no need to economize in any manner.

The front is of face brick with a huge triangular marquee dominating a business block. Entrance lobby and novel cantilevered boxoffice are faced with blue and cream colored marbles trimmed with aluminum. Wide Herculite glass doors give entrance to a wider and higher inner lobby equipped with an escalator to the balcony level and dominated by huge mosaic murals by Max Spivak.

Ten aluminum doors open to the orchestra. Above a wood veneer wainscot, the walls are a series of architectural planes, each in a clear, bright tone of green, red, yellow or blue, and indirectly lighted by strip coves. The proscenium arch is a huge frame with a brilliant yellow screen curtain. On the rear wall of the balcony a colorful plaid fabric covers the acoustical material. Seats are spaced at 38-inch row intervals for a maximum of leg room.

All lounges, powder rooms and smoking rooms boast of modern furniture with specially woven upholstery fabrics. Modern paintings adorn the walls, and all equipment is the best obtainable.

Here is a superior theatre, out of the usual commercial lanes of the current time in both investment and objective.





AN INTIMATE FEELING is accomplished despite the tremendous size of the Calderone.

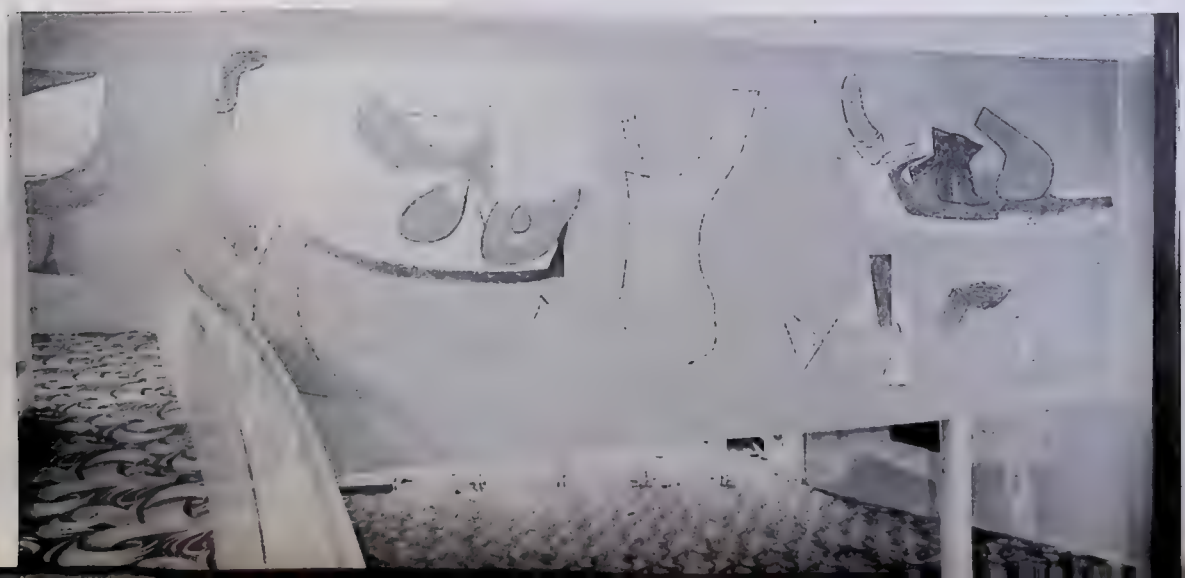
REFERENCE DATA

OWNER: Erone Corp.
OPERATOR: Skouras Theatres Corp.
ARCHITECT: William Lescaze.
SEATING CAPACITY: 2,436.
COST OF BUILDING: $1,350,000.
COST OF EQUIPMENT: $150,000.
SIZE OF LOT: 25,000 square feet.

Acoustical Material: National Gypsum Macoustic.

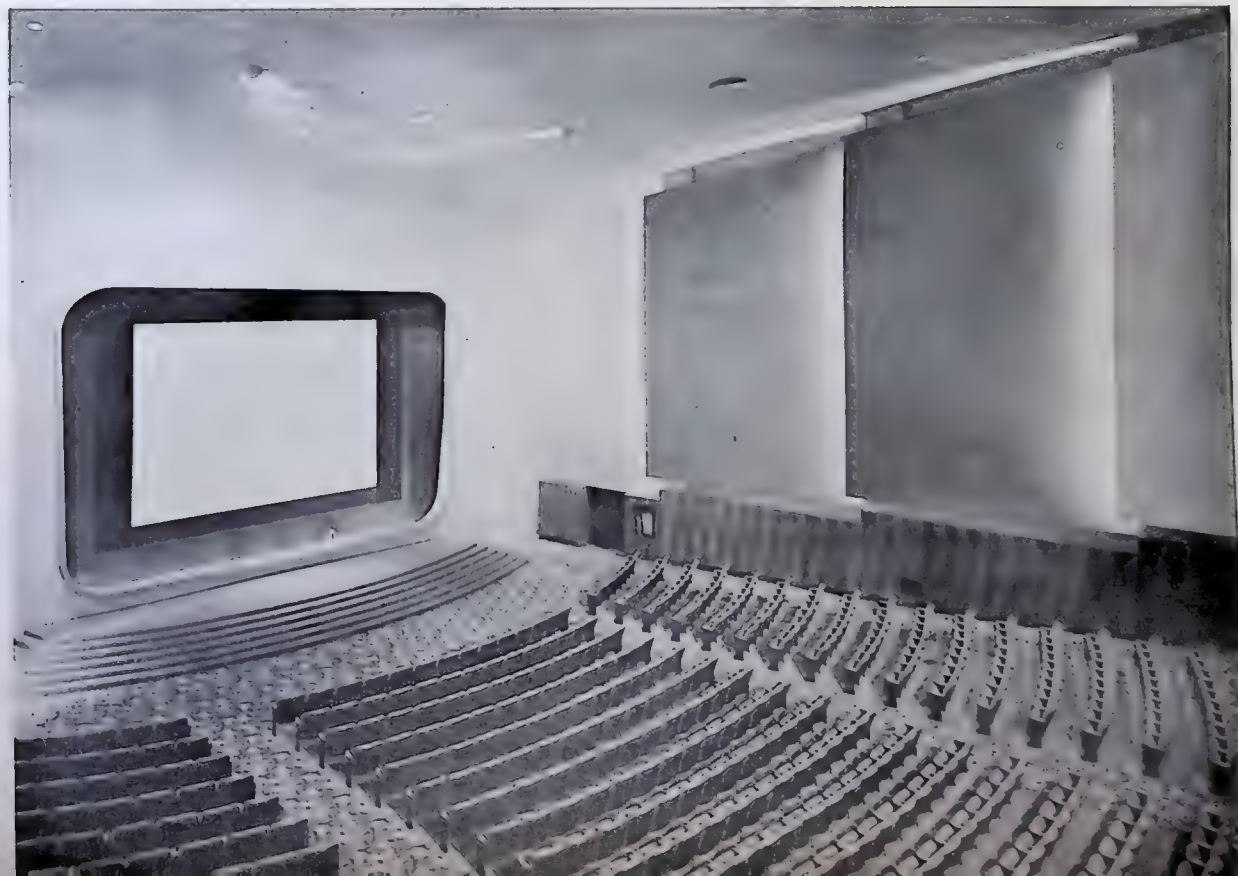
Air Conditioning: Armo Cooling Co.
Carpets: Alexander Smith & Sons Carpet Co.
Chairs: American Seating Co. Bodi-Form.
Coinchanger: Brandt Automatic Cashier Co.
Decorator: Gregory Germanoff.
Escalator: Otis Elevator Co.
Draperies & Stage Curtains: Novelty Scenic Studios, Inc.
Generators: Hertner Electric Co.
Lenses: Bausch & Lomb Optical Co. EF 5.75.
Lighting Controls: Ward Leonard Electric Co. Autrastat Dimmer.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Screen: Walker-American Corp.
Sign & Marquee: Continental Sign Co.
Sign Letters: Adler Silhouette Letter Co. 12" Black Face Third Dimension.
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.

MAX SPIVAK'S MODERN MURALS are picked up and reflected many times by the mirrored walls.





RELATIVE SIZE of the main floor and balcony, and of the picture screen, can best be judged by comparing them to the known size of the elaborate theatre chairs. The strikingly effective combination of indirect trough and down lighting in the Calderone can also be observed.







ODEON-HYLAND •

Toronto, Canada

As the only acceptable site had a frontage of only 34 feet, nearly the entire front needed to be open to the street to accommodate the attraction boards. The solution was a set back lobby entrance with the marquee and name sign becoming a protrusion at one side only.

A long lobby, resulting from a distance of 120 feet between the street entrance and auditorium, is visually shortened through a series of sweeping breaks to accommodate the boxoffice, manager's office, candy counter, balcony stairway, etc.

The auditorium seats 884 on the main floor and 473 in the mezzanine. Color scheme is coral with olive-green dado. Chairs are upholstered in maroon and gray. The main curtain and wings are gold brocade and the inner curtain is silver.

REFERENCE DATA

OPERATOR: The Odeon Theatres (Canada), Ltd.

ARCHITECT: Jay I. English (deceased), Leslie H. Kemp.

SEATING CAPACITY: 1,355.

Air Conditioning: Air Conditioning Engineering Co.

Chairs: International Hardwood Co.

Changeovers: Gaumont-Kalee.

Generators: Automatic Devices Co. Stabilarc.

Projection Lamps: Gaumont-Kalee "21".

Projection Machines: Gaumont-Kalee.

Rewinders: Wenzel Projector Co.

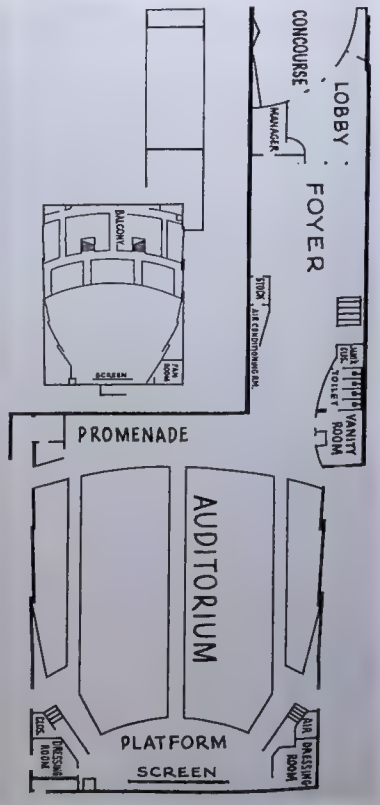
Screen: Gaumont-Kalee.

Sign Letters: Adler Silhouette Letter.

Sound: Gaumont-Kalee.

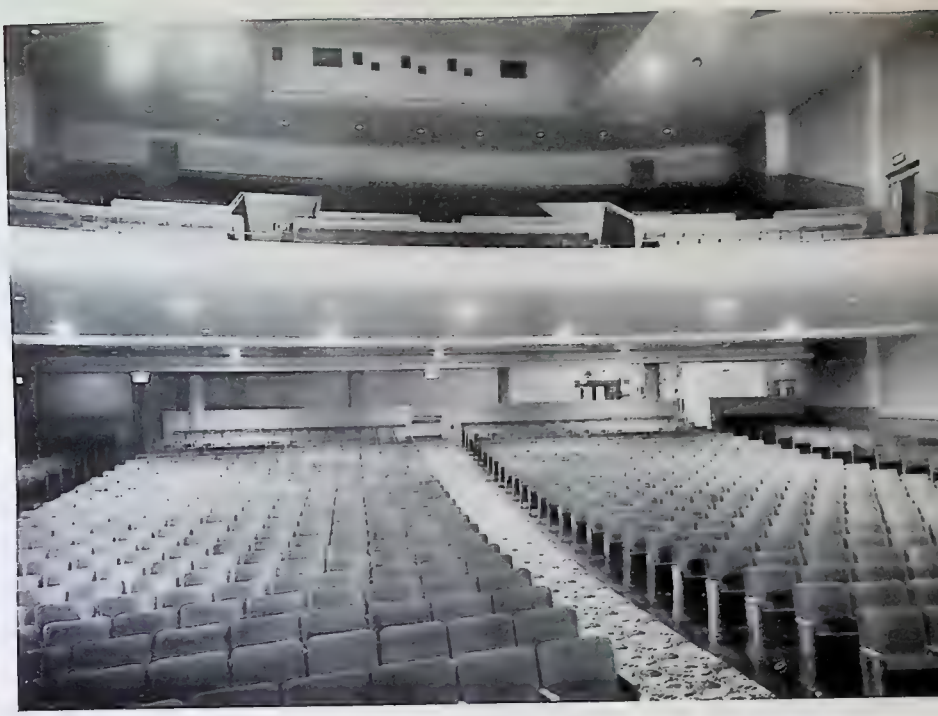
Supply Dealer: Gaumont-Kalee, Ltd.











MAKE-UP TABLES in the ladies' lounge are built-in and well lighted. The lounge back of the mezzanine is an airy spot for a smoke or a walt. The traditional proscenium and arch is missing.





FLORIDA •

West Palm Beach, Fla.

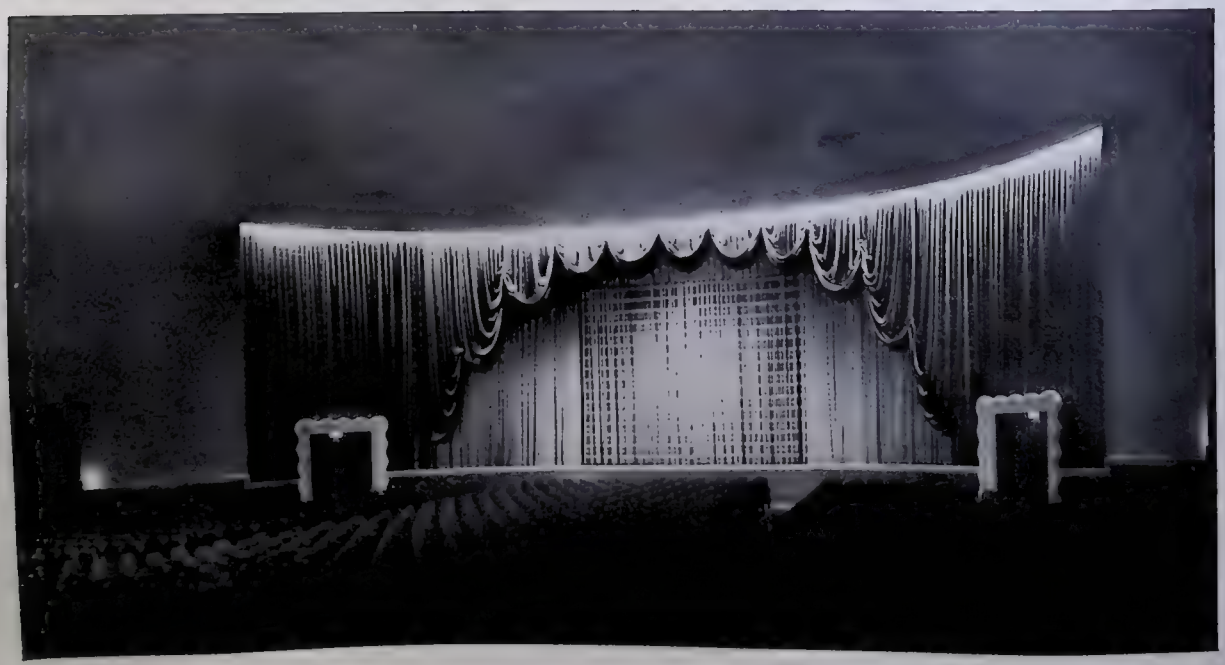
Planned to provide the utmost in patron comfort as a first-run theatre in this industrial city back of the famous winter resort, the Florida is of contemporary design and is decorated in luxurious tropical fabrics and colors, with tropical plantings a feature throughout the interior. Special attention was given to spaciousness and comfort.

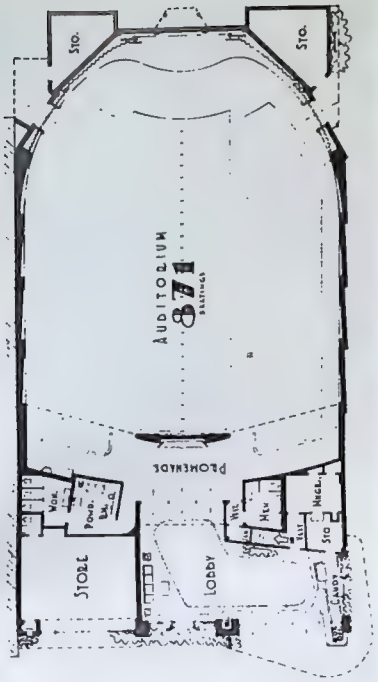
Sidewalls of the auditorium are broken into vertical panels for proper acoustics, and the proscenium end is contour draped with the draw curtain repeating the colorful effect of the huge drapery that highlights the lobby.

REFERENCE DATA

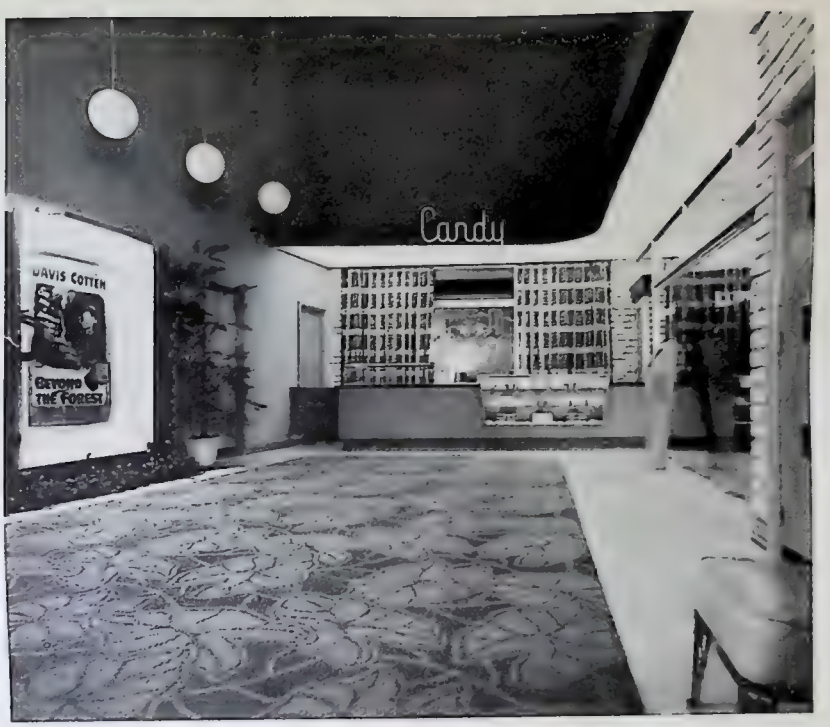
OWNER: Florida Coastal Theatres, Inc.
OPERATOR: Florida State Theatres, Inc.
ARCHITECT: Kemp, Bunch & Jackson.
SEATING CAPACITY: 871.
COST OF BUILDING: $160,000.
COST OF EQUIPMENT (including air conditioning): $103,000.
SIZE OF LOT: 75′ x 153′.

Air Conditioning: Carrier Corp.
Carpets: Alexander Smith & Sons Carpet Co., A. & M. Karagheusian, Inc.
Chairs: Kroehler Mfg. Co. Push-Back.
Changeovers: Weaver Mfg. Co.
Coinchanger: Brandt Automatic Cashier.
Curtain Controls & Track: Knoxville Scenic Studios, Inc.
Decorator: Kemp, Bunch & Jackson.
Draperies & Stage Curtains: Knoxville Scenic Studios, Inc.
Generators: Hertner Electric Co.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Rewinders: GoldE Mfg. Co.
Screen: Walker-American Corp. Plastic.
Sign & Marquee: Patrick Neon Displays.
Sign Letters: Adler Silhouette Letter Co. 10″, 17″ Plastic.
Sound: RCA.

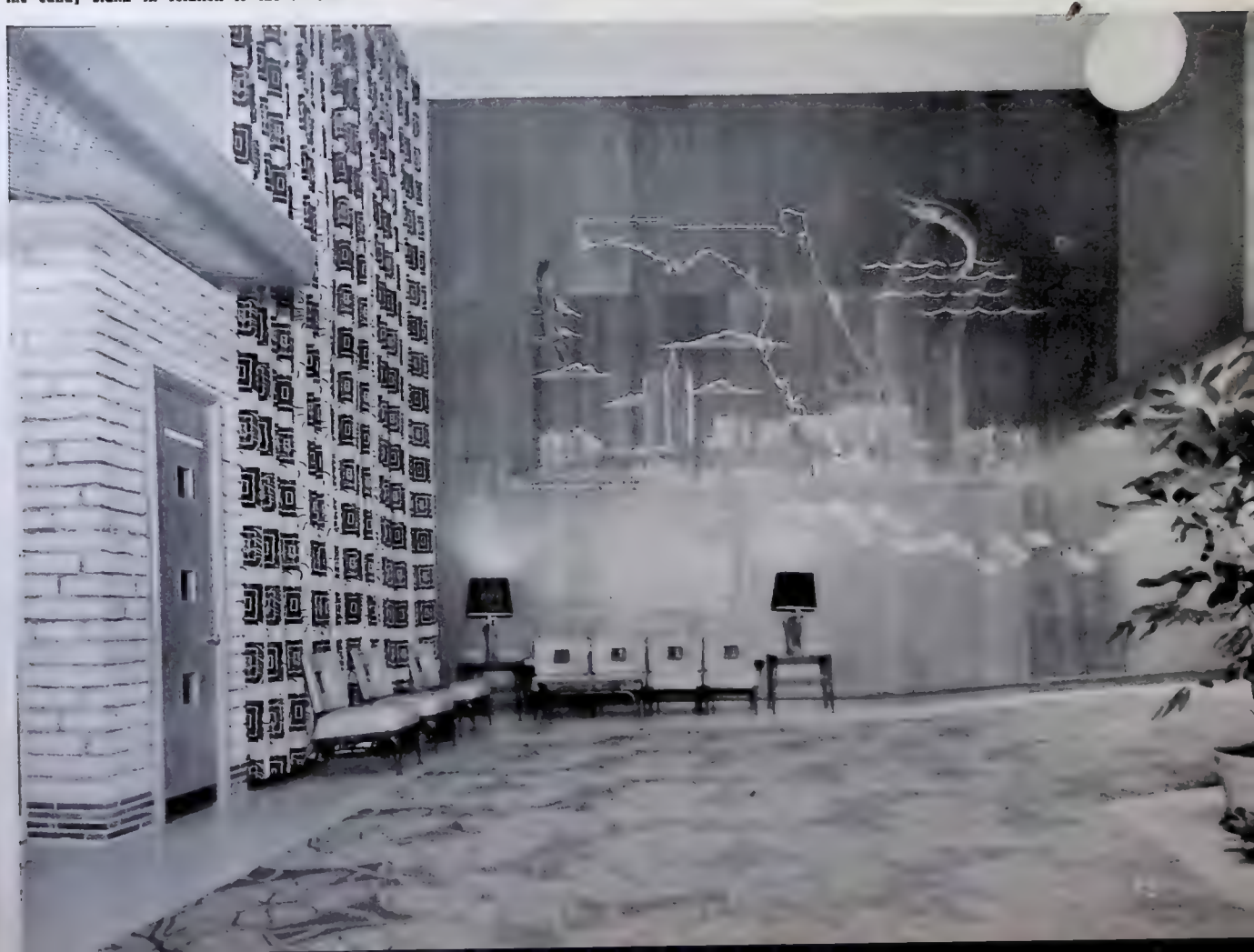




THE PLAN is efficient. Note the attractively furnished irregular lobby and the positioning of the candy stand in relation to the boxoffice.



THE LOBBY is outstanding. Large figured rugs are countersunk in a terrazzo border, and the dropped light trough accents the confection stand and entrance doors. One wall is paneled in light mahogany on which has been painted a mural depicting a map of Florida and the waterfront of West Palm Beach.





MAGNOLIA •

Seattle, Wash.

Designed as a third-run theatre catering to a well-to-do and professional clientele at a top admission of 59 cents, the Magnolia is comfortable, modern and complete. Constructed of reinforced concrete, steel trusses, and concrete roof, it is truly fireproof.

A liberal parking area is at the rear. Lower portion of the front is faced with brick, and around the entrance with travertine marble and red granite. Over the central portion is a structural glass panel. Herculite glass doors are activated by electric eye controls.

The auditorium is reached through a generous curved lobby and foyer carried out in a range of colors from buff to coral. Strong carved decorative panels depicting magnolia flowers are the dominant decorative theme on either side of the proscenium. Side wall panels are in strong green with vertical fluting in gold.

Approach to the mezzanine and lounge is by two stairways at either side of the foyer. Off this lounge are a tastefully decorated ladies' suite with an adjacent "cry room," a men's suite, and ushers' dressing rooms. The entire interior is carpeted in a rich magnolia pattern.

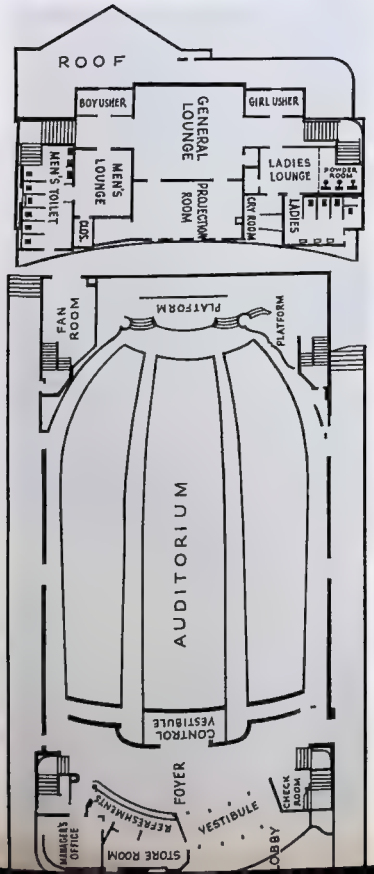
REFERENCE DATA

OWNER & OPERATOR: Sterling Theatres, Inc.
ARCHITECT: B. Marcus Priteca.
SEATING CAPACITY: 986.

Acoustical Material: Fiberglas Panels, Acoustone, Vermiculite.
Carpets: J. S. Friedman Co.
Chairs: Kroehler Mfg. Co.
Coinchanger: Brandt Automatic Cashier
Curtain Controls & Track: Vallen, Inc.
Decorator: A. B. Heinsbergen Decorating Co.
Generators: RCA-Century 70-140 amp.
Lenses: Kollmorgen Optical Corp. F 2.0.
Projection Lamps: RCA Brenkert Enarc Suprex.
Projection Machines: RCA Brenkert BX-80.
Rewinders: GoldE Mfg. Co.
Screen: RCA Snowhite.
Sign Letters: Adler Silhouette Letter Co. 10" Red Plastic.
Sound: RCA PG-240.
Supply Dealer: Modern Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.
Vending Machines: Manley, Inc. Popcorn.







CEILING FIXTURES throw indirect lighting against the ornamental stepped ceiling, but the gigantic carved magnolia flower panels dominate all other ornamentation and set the decorative theme.





THE CONTROL VESTIBULE at the Magnolia, Seattle, Washington, is accented by carved replicas of its name flower. One of the theatre's highlights is the big mezzanine lounge that is tastefully decorated and furnished. One entire wall is mirrored, doubling its apparent size.







REFERENCE DATA

OWNER: Pem Construction Co.
OPERATOR: Theatre Enterprises, Inc.
ARCHITECT: Julius Myerberg.
SEATING CAPACITY: 1,700.
COST OF BUILDING: $425,000.
COST OF EQUIPMENT (including air conditioning): $70,000.
SIZE OF LOT: 97' x 230'.

Acoustical Material: Glass Fibre Board.
Air Conditioning: Westinghouse Electric Corp.
Carpets: Bigelow-Sanford Carpet Co.
Chairs: Heywood-Wakefield Co.
Changeovers: Essannay Electric Mfg. Co.
Coinchanger: Brandt Automatic Cashier Co.
Curtain Controls & Track: Automatic Devices Co.
Decorator: Paramount Decorating Co.
Draperies & Stage Curtains: Paramount Decorating Co.
Generators: Imperial Electric Co.
Lenses: Bausch & Lomb Optical Co. F 2.0.
Projection Lamps: Strong Electric Co.
Projection Machines: Motiograph, Inc.
Rewinders: Goldberg Bros.
Rubber Mats: Lorraine Rubber Eng. Co.
Screen: Da-Lite Screen Co., Inc.
Sign & Marquee: Claude Neon Service.
Sign Letters: Wagner Sign Service, Inc., 10", 17" Plastic.
Sound: Century Projector Co.
Supply Dealer: Henry Dusman Co.
Ticket Issuing Machine: General Register Corp.
Ticket Chopper: GoldE Mfg. Co.
Wall Fabrics: Paramount Decorating Co.

CREST •

Baltimore, Md.

Sculptured glass, pattern-set face brick and granite, worked into planes and sweeping curves, and capped with a neon-trimmed roof panel, make this a most unusual theatre front.

Lobby walls are paneled in pickled finish oak with the center of interest the curved dual staircase to the lounge.

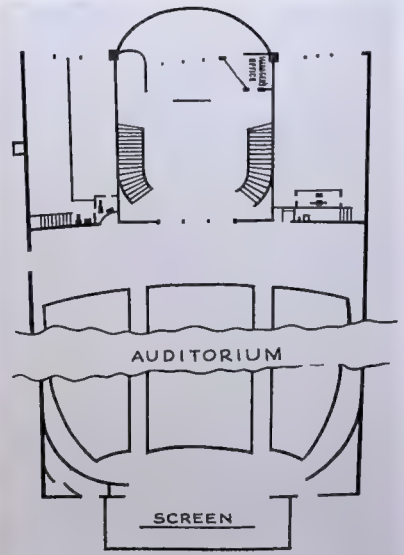
The large circular lounge is a theatre unit in itself built around a large projection television screen. The same oak wall paneling is ornamented by a painted floral frieze. Five glass panels, beautifully draped and etched, double in effectiveness from the theatre front to form the rear wall of this room.

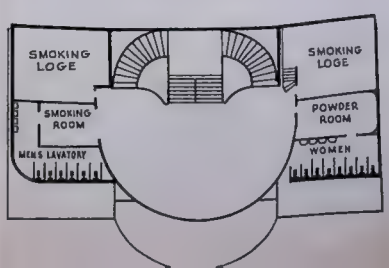
The 1,700 seats on one floor require a large auditorium, but it is made to seem more intimate by accenting the decoration of the rear wall.

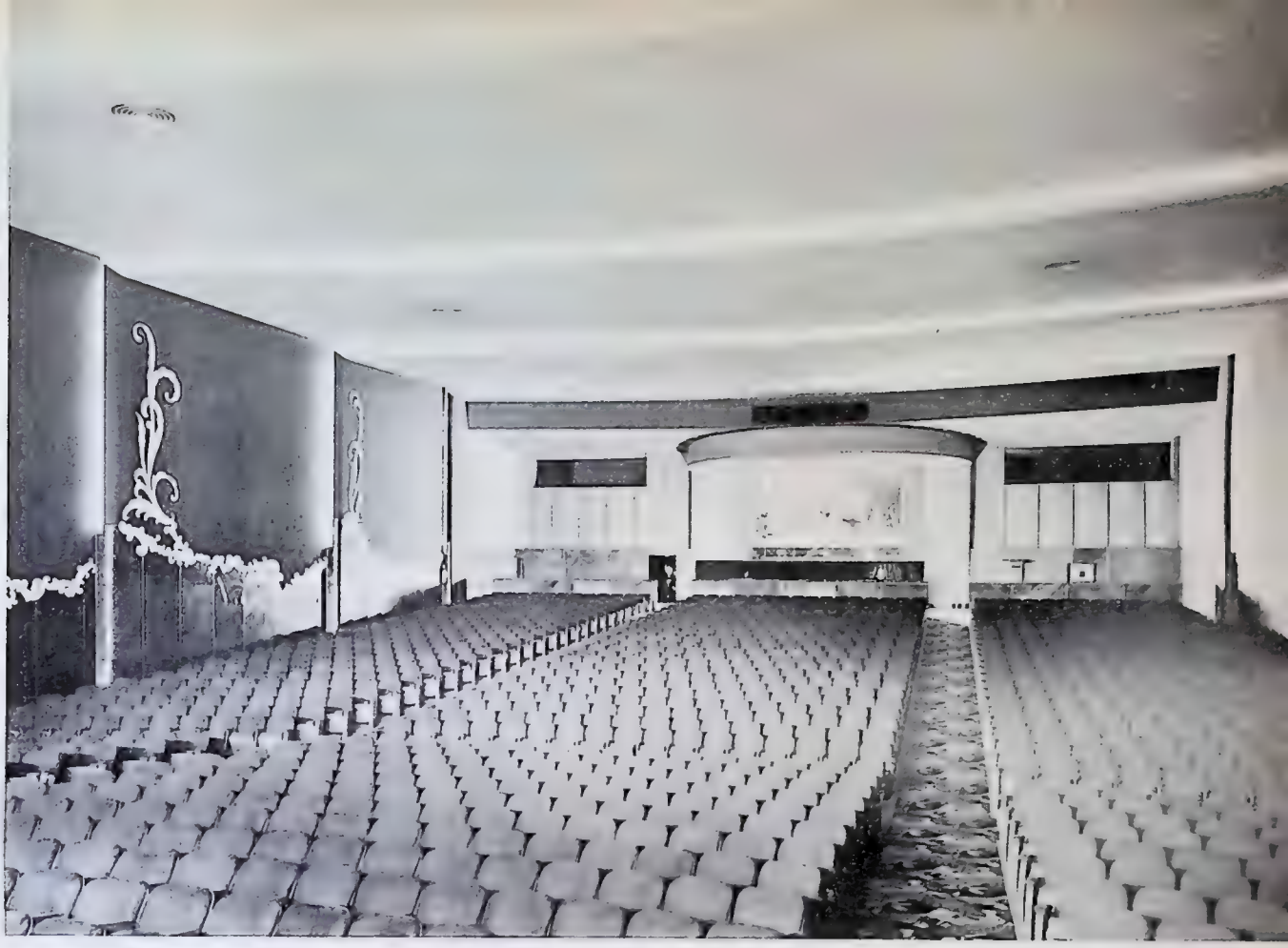


THE TELEVISION LOUNGE is rich and informal with the viewing angle across the stair well. Sweeping curves of the grand staircases are accentuated by the lobby ceiling light coves.





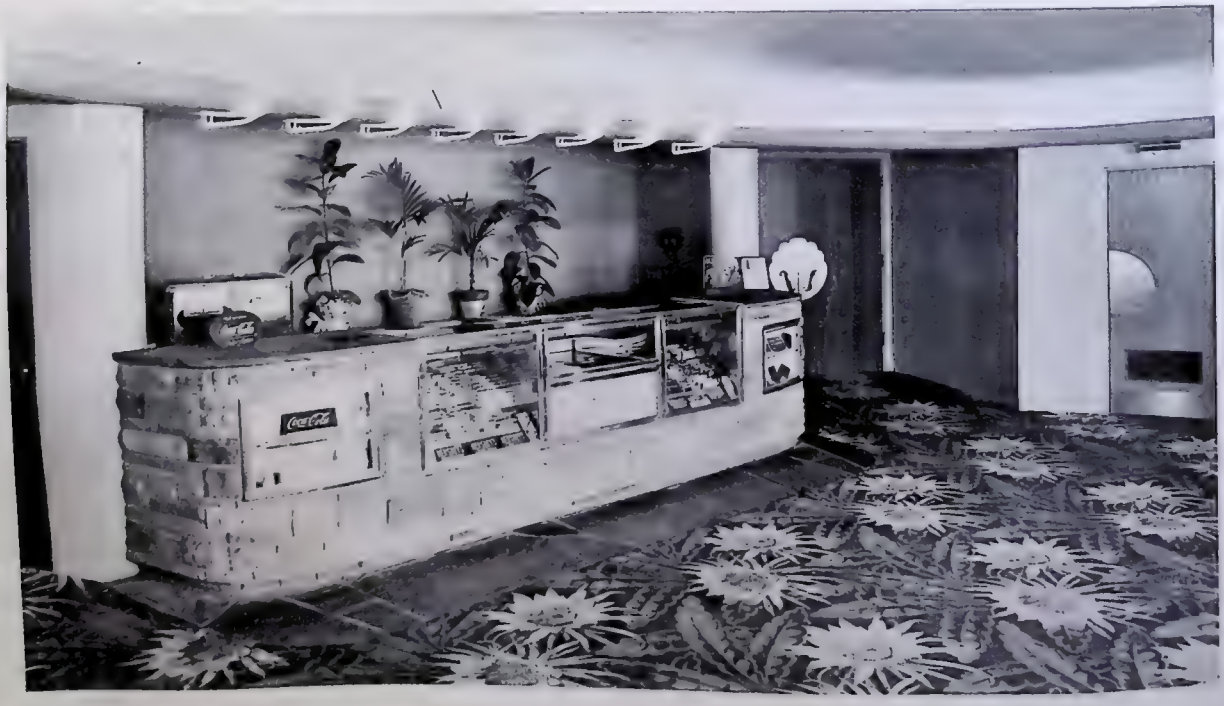


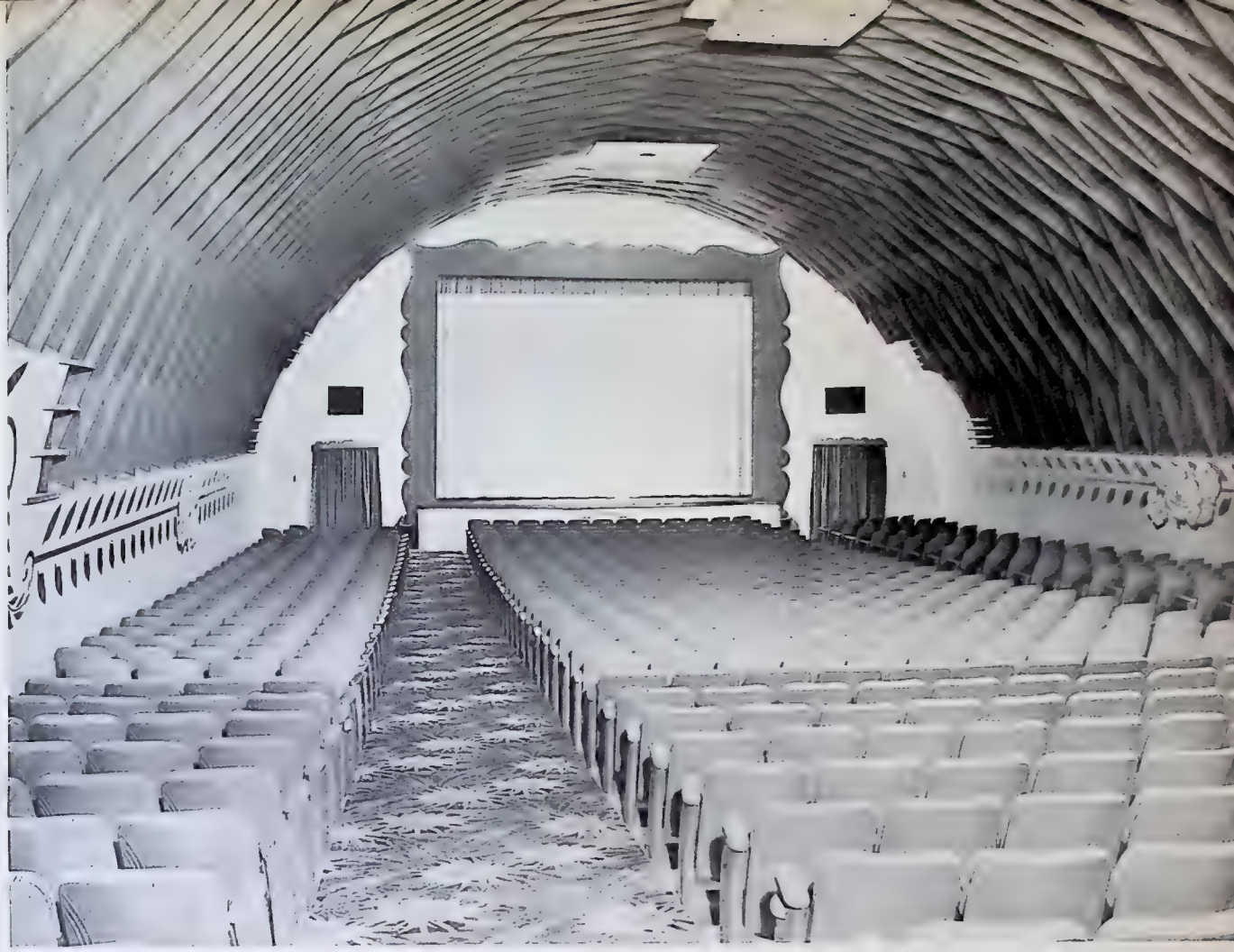


REAR WALL of the auditorium of the Crest, Baltimore, Maryland provides many interesting variations. Mauve fabric in vertical waves surrounds a central mural accented by a huge semi-circular ceiling cap and side pilasters. So dominant is this theme that the masked projection ports and windows of the two private viewing lounges go unnoticed. Side wall and proscenium treatments are also excellent.




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CONTINUOUS FROM 2 P.M.
NOW PLAYING
PAGNOL'S
VERY BEST
"FANNY"
RAIMU
& CHARPIN
FREE PARKING


Coca-Cola



COLORADO •

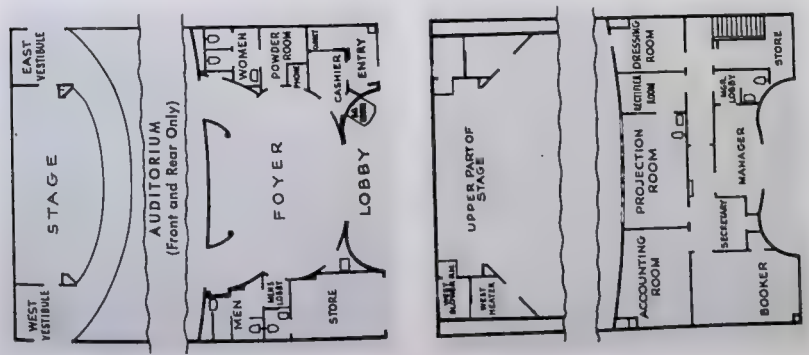
Pasadena, Calif.

A first-run "art" house catering to a middle and upper class populace of 80,000, the Colorado was opened in January, 1949. Situated in a busy neighborhood shopping district, its red brick construction and lamella roof are contributing ingredients to the erection of an attractive theatre within a modest price range.

The front of the theatre, which lacks the conventional overhanging marquee, is marked by a boxoffice recessed in a side wall, large walnut poster cases, a simple vertical attraction board, and a geometric pylon.

An interior color scheme of sunset red and green is embellished by artistic designs stenciled on the walls. The flagstone candy counter in one corner of the lobby is strategically located opposite the entrance door. Natural finish doors open into lounges with green walls and built-in sofas. The toilet rooms are handsomely tiled.

The front of the auditorium is distinguished by a pie-crust frame around the stage proscenium opening. A simple decorative motif runs along the side walls and part of the way up the front arch.



REFERENCE DATA

OWNER: Westates Theatres.
OPERATOR: Hatch & Blackman.
ARCHITECT: Clarence J. Smale.
SEATING CAPACITY: 748
COST OF BUILDING: $80,000.
COST OF EQUIPMENT: $29,500.
SIZE OF LOT: 50′ x 150′.

Carpets: A. & M. Karagheusian, Inc.
Chairs: Heywood-Wakefield Co.
Changeovers: Essannay Electric Mfg. Co. Strong "Zipper."
Coinchanger: Coinometer.
Curtain Controls & Track: Automatic Devices Co.
Lenses: Kollmorgen Optical Corp. F 2.0.
Projection Lamps: C. S. Ashcraft Mfg. Co. C-70.
Projection Machines: Motiograph, Inc. AA.
Rewinders: Goldberg Bros.
Screen: B. F. Shearer Co. Starke Cycloramic.
Sign & Marquee: Wagner Sign Service, Inc.
Sign Letters: Wagner Sign Service, Inc. 10″ Plastic.
Sound: Motiograph, Inc. Mirrophonic
Supply Dealer: B. F. Shearer Co.
Ticket Issuing Machine: General Register Corp.





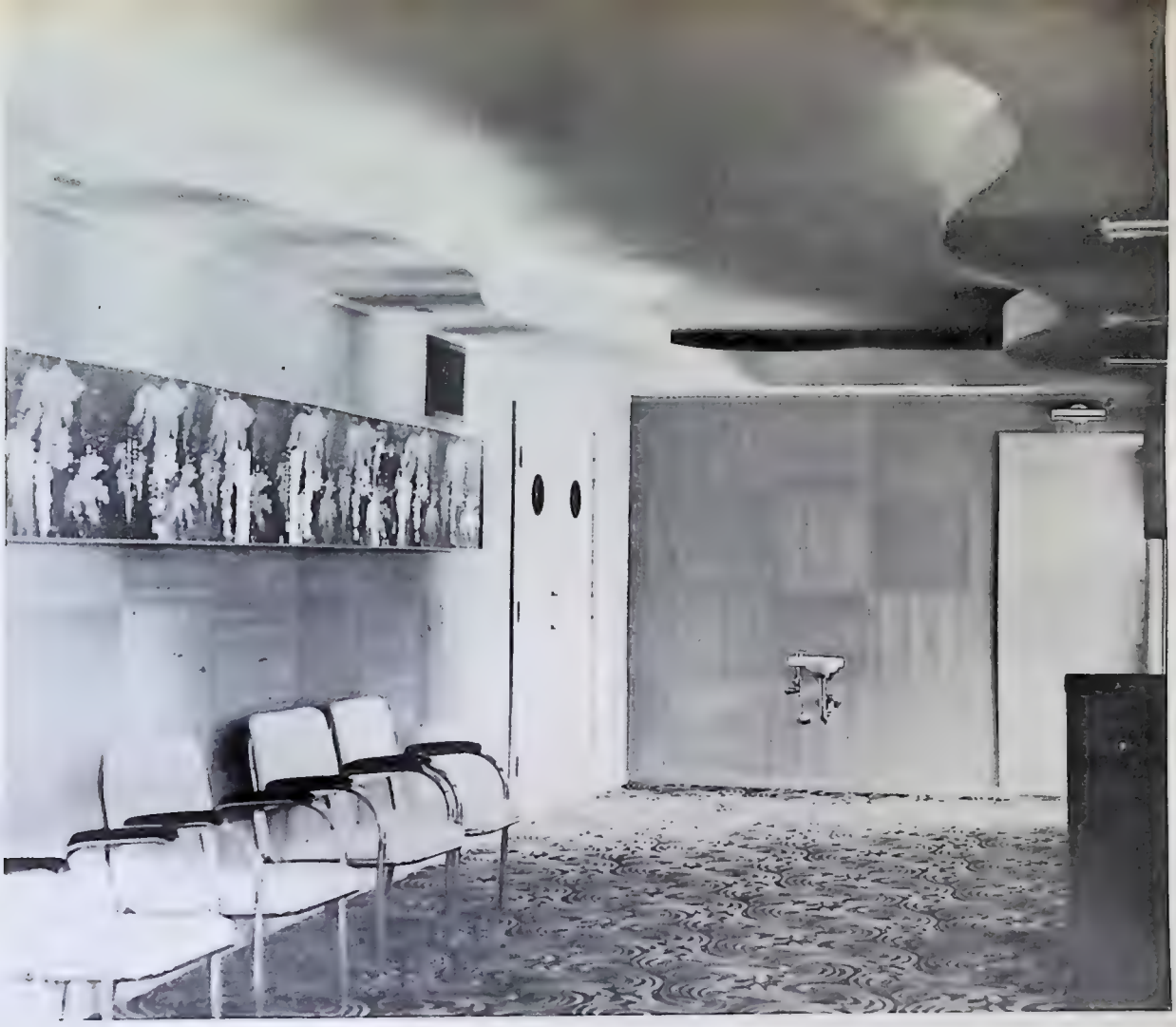
3 LAKES •

Three Lakes, Wisc.

In keeping with the "dairyland" character of its location, the creamy white asbestos front of the Three Lakes, opened June 12, 1949, effectively invites both the natives and summer vacationists of its community. Stainless steel trim and a neon facade design on a metal shield also aid in endowing the stran-steel Quonset type of structure with a beckoning exterior.

The interior of this modest-priced theatre, which shows first-run musical comedy and action pictures under a three-change-a-week policy, is done primarily in brown with shadings running the gamut from aqua to lavender. The lobby and foyer, however, are trimmed in gray and black with a four-foot wainscoting. The toilet rooms and the powder room have been plastic tiled in pink and white.

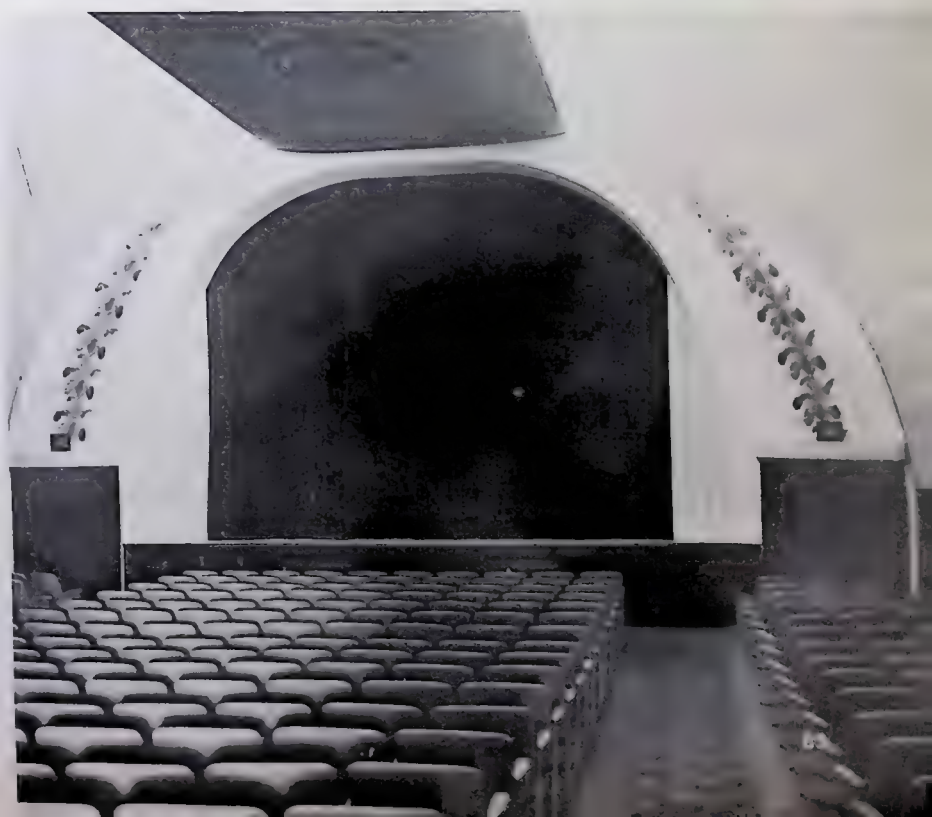
Acoustically treated throughout, the simple decorative scheme of the 346-seat auditorium is highlighted by two plant sprays which bend gracefully with the curve of the proscenium arch. Ceiling anemostats provide healthful, conditioned air at all times, while heavily upholstered chairs provide every patron with the utmost in modern seating comfort.



REFERENCE DATA

OWNER: Three Lakes Theatre Corp.
OPERATOR: Joseph Gibbs.
ARCHITECT: Fred (Cy) Williams.
SEATING CAPACITY: 346.
COST OF BUILDING: $57,000.
COST OF EQUIPMENT (including air conditioning): $16,000.
SIZE OF LOT: 50' x 120'.

Carpets: Mohawk Carpet Co.
Chairs: International Seat Corp.
Changeovers: Essannay Electric Mfg. Co. Strong "Zipper."
Draperies & Stage Curtains: Vic Manhardt Co., Inc.
Lenses: Kollmorgen Optical Corp. Super Snaplite.
Projection Lamps: C. S. Ashcraft Mfg. Co.
Projection Machines: Motiograph, Inc. AA.
Rectifiers: Baldor Electric Co.
Rewinders: GoldE Mfg. Co.
Screen: Da-Lite Screen Co., Inc.
Sound: Motiograph, Inc. Mirrophonic.
Supply Dealer: Vic Manhardt Co., Inc., The Ray Smith Co.





UPTOWN •

Harrisburg, Pa.

Designed to attract a "class" patronage from its surrounding residential neighborhood, the Uptown, opened October 6, 1949, incorporates a number of television lounge, free parking lot, and hearing aids. Features are shown 28 days after downtown first-runs.

The brick front, lined with cinder block, is faced with corrugated transite painted silver gray. The outside lobby is paneled in birch wood with indirect cove light, and an attractive refreshment special features such as a "cry room," stand is located at one side. The foyer-standee area is similarly decorated, and multicolored carpets add striking effect.

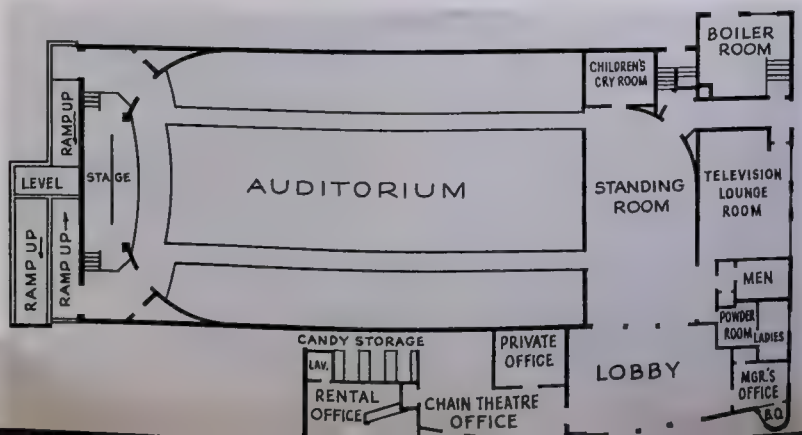
Color scheme of the main auditorium is blue and cocoa, with fabric-hung walls, acoustical ceiling, wood wainscoting, and decorative lighting fixtures on sidewalls.





A STAINLESS STEEL MARQUEE dominates the corner front in the top photo. Above: Vending machines in the standee area offer waiting patrons a snack, or they may pass the time in the television lounge. Below: Plants and poster cases adorn the lobby.









FAMILIAR CARTOON CHARACTERS and nursery equipment divert nervous children in the "cry room", where parents may continue to watch the show. Lighting sets off the modern roccoco pattern flowing along the sidewalls.

REFERENCE DATA

OWNER & OPERATOR: Mark Rubinsky Theatres.
ARCHITECT: B. E. Starr.
SEATING CAPACITY: 693.
COST OF BUILDING (including air conditioning): $140,000.
COST OF EQUIPMENT: $30,000.
SIZE OF LOT: 90′ x 220′.

Acoustical Material: Zonelite Plaster, Celetix Tile Blocks.
Air Conditioning: Westinghouse Electric Corp.
Carpets: Alexander Smith & Sons Carpet Co.
Chairs: Ideal Seating Co. Slide Back.
Changeovers: Essannay Electric Mfg. Co. Strong "Zipper".
Coinchanger: Brandt Automatic Cashier Co.
Curtain Controls & Track: Automatic Devices Co.
Decorator: Paramount Decorating Co.
Display Frames: Universal Corp. Sealuxe.
Generators: Motiograph, Inc. 10 H.P. 70-140 Amps.
Lenses: Kollmorgen Optical Corp. EF 4.25 F 2.0.
Projection Lamps: Motiograph, Inc.
Projection Machines: Motiograph, Inc. AA.
Rewinders: Wenzel Projector Co. Hand, GoldE Mfg. Co. Automatic.
Screen: B. F. Shearer Co. Starke Cycloramic.
Sign & Marquee: United Sound & Signal Co.
Sign Letters: Wagner Sign Service, Inc. 10″ Plastic.
Sound: Motiograph, Inc. Mirrophonic.
Supply Dealer: Vincent M. Tate Theatre Equip.
Ticket Issuing Machine: General Register Corp.
Ticket Chopper: GoldE Mfg. Co.





CITY LINE CENTER •

Philadelphia, Pa.

Hub of an ultra-modern suburban shopping center with 24 stores and parking accommodations for 1,000 cars, this de luxe showplace was opened August 31, 1949, to a surrounding middle and upper-class drawing populace of approximately 400,000. Key run features are shown with the accent on sophisticated comedy.

A sweeping overhanging marquee dominates the front, which has a red terrazzo base, a buff structural glass face, a stainless steel boxoffice, and transparent glass entrance doors. Spots and cold cathode light illuminate the soffit.

An intriguing geometric design, set in the six-color terrazzo floor of the lobby, directs the entering patron into the handsomely appointed foyer. Here, rich green carpeting, pink ceiling, and red and gold walls combine to produce an atmosphere of decorous charm. At one side of the foyer are located lounges with Fabron walls adjoining the tiled toilet rooms.

The auditorium, separated from the foyer by a soundproof glass partition, has green walls and a buff ceiling. Indirect lighting plays softly over the entire interior. The colorful design of the fabric wall panels, which harmonizes with that of the draw curtain, and proscenium drapes add decorative effect.

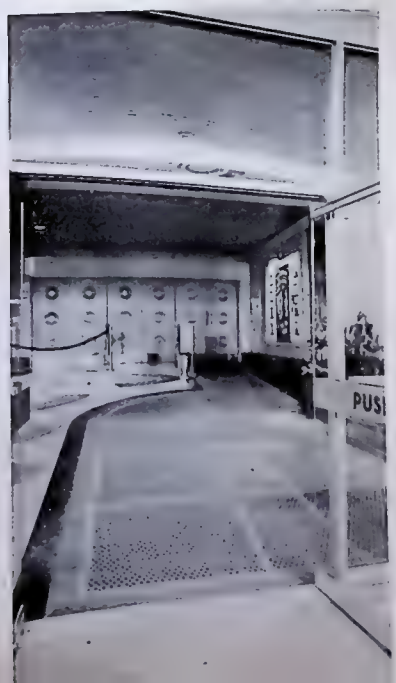
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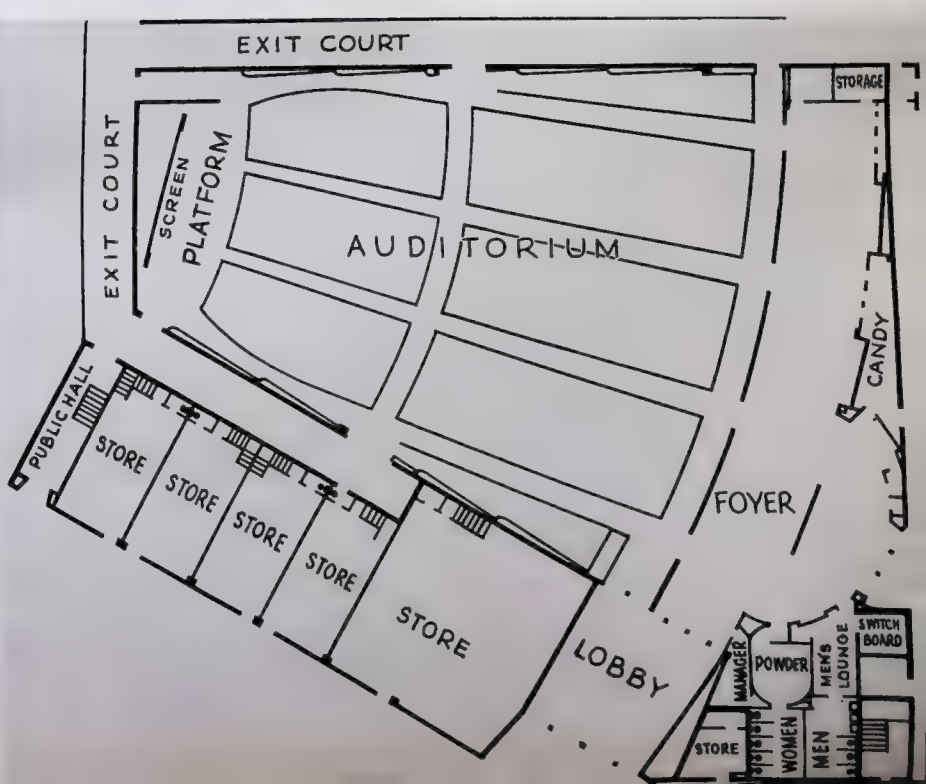
OWNER: City Line Center, Inc.
OPERATOR: Fried Theatre Mgt. Co.
ARCHITECT: William H. Lee.
SEATING CAPACITY: 1,530.
COST OF BUILDING (including air conditioning): $350,000.
SIZE OF LOT: 12 acres.

Acoustical Material: Rockwool Bats, Acoustic Plaster.
Carpets: Bigelow-Sanford Carpet Co., Inc.
Chairs: Kroehler Mfg. Co.
Changeovers: Weaver Mfg. Co.
Coinchanger: Brandt Automatic Cashier
Curtain Controls & Track: Vallen, Inc.
Decorator: David E. Brodsky & Associates.
Draperies & Stage Curtains: David E. Brodsky & Associates.
Generators: Hertner Electric Co.
Lenses: Kollmorgen Optical Corp. Super-Snaplite.
Lighting Fixtures: Voigt Co.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc
Projection Machines: International Projector Corp. Simplex "X-L."
Rewinders: Goldberg Bros.
Rubber Mats: Lorraine Rubber Eng. Co.
Screen: Walker-American Corp.
Sign & Marquee: Apex Sign Co.
Sign Letters: Adler Silhouette Letter Co. 10"-21" Plastic.
Sound: International Projector Corp. Simplex 4 Star.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.



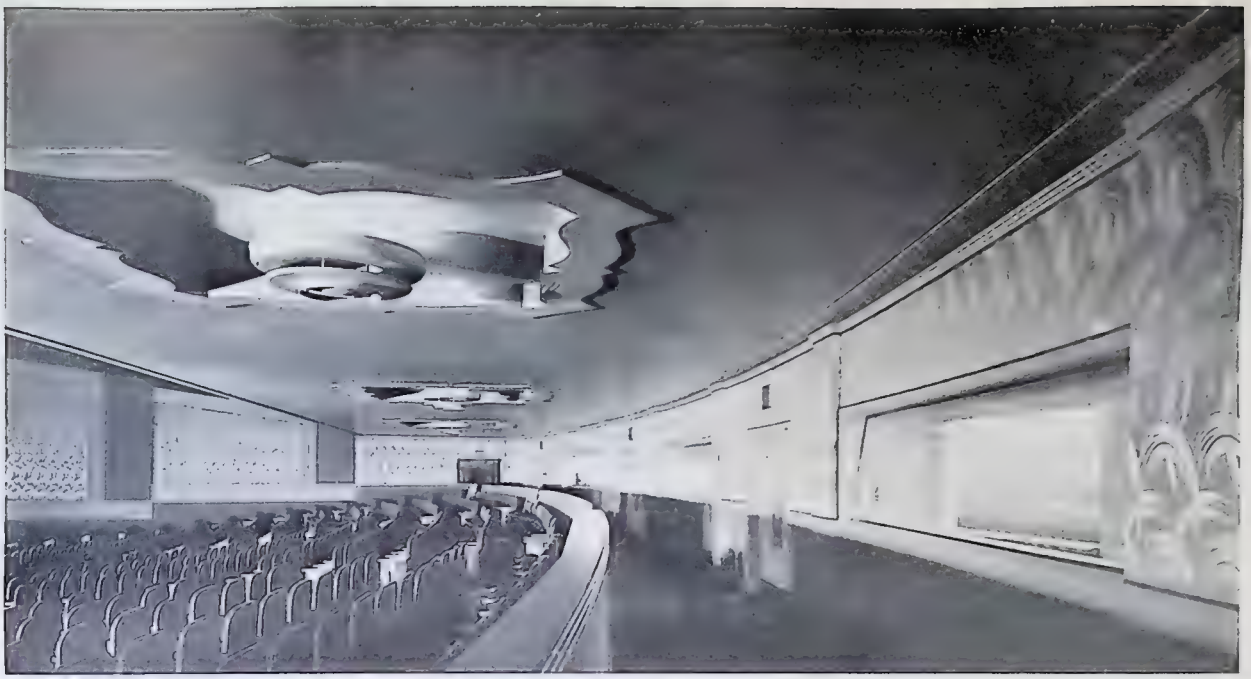
RECESSED SETEES in the foyer, shown above, provide waiting patrons with comfortable relaxation. Below: Directional rubber matting protects the terrazzo floor of the lobby against muddy feet. Floor plan shows theatre in relation to stores.



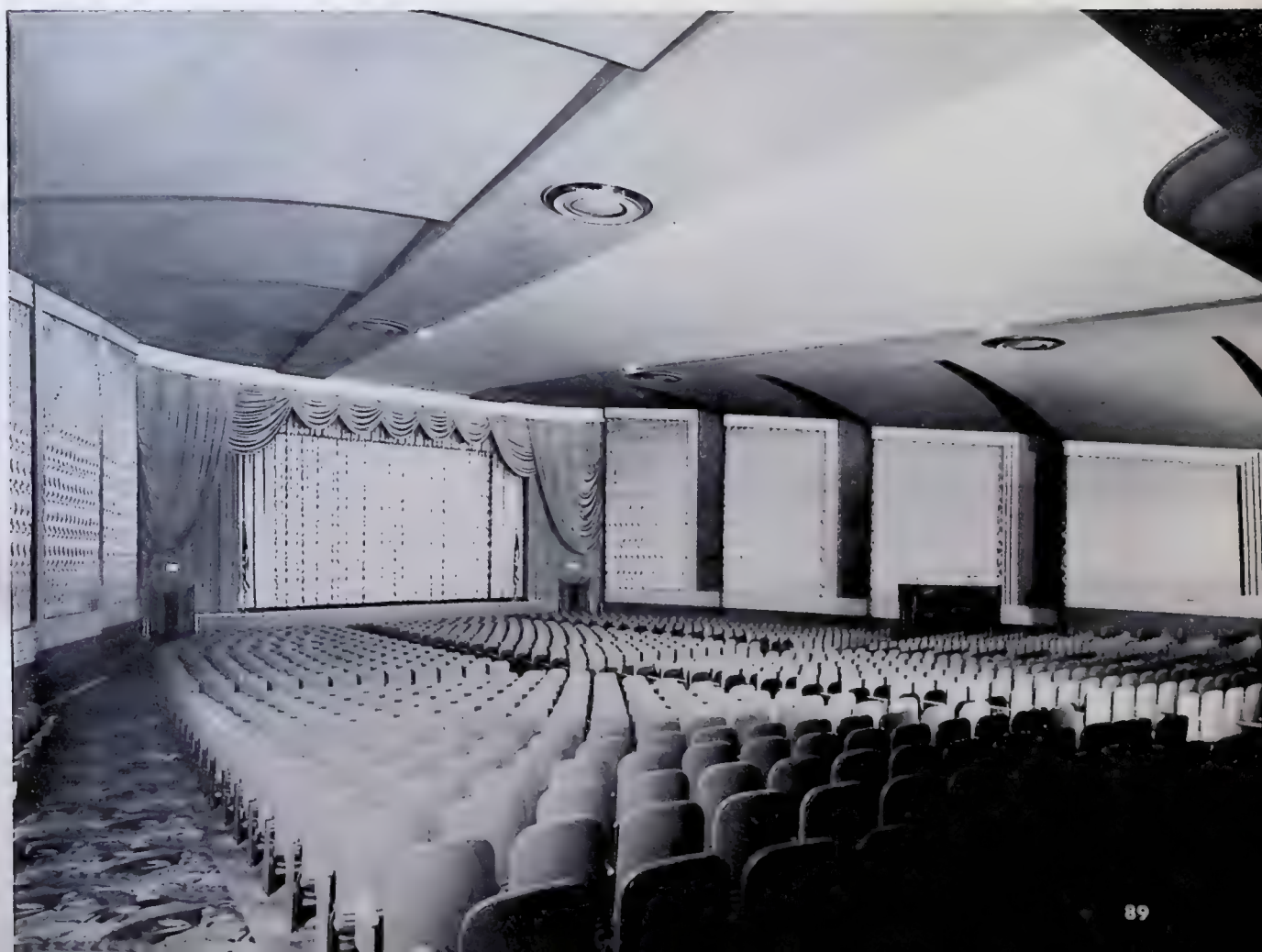


AN AIR OF ELEGANCE pervades the spacious auditorium above. A well-stocked candy stand is equipped to serve the confection inclinations of patrons in the photo of the foyer below. The lattice work above the upholstered setee gives it the inviting appearance of a garden bench.





DECORATIVE CEILING RECESSES in the rear of the auditorium contain cooling anemostats. Ample space has been provided behind the last row of seats to enable entering patrons to move to any aisle. Below: The audience is seemingly drawn onto the stage by inwardly tapering walls.





ARLINGTON •

Indianapolis, Ind.

The opening of the Arlington on October 6, 1949, was quite a community event, since it was the first new indoor theatre built in Indianapolis in many years. Located in a middle-class neighborhood shopping district with a drawing area estimated at 20,000, the theatre operates on a first subsequent-run policy, 30 days after downtown performances.

Indiana limestone and maroon structural glass have been used effectively in the front. A sawed limestone pylon extends 10 feet above the building.

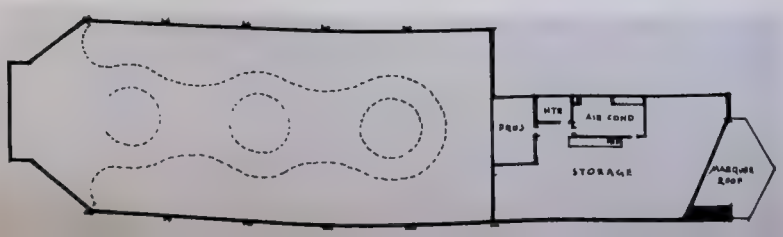
Both the lobby and foyer have plastered walls painted in a combination of greens, burnt orange, and brown. The ceilings, done in the same color combinations, have concealed neon lighting troughs. The lobby floor is terrazzo, and its candy stand serves both patrons and sidewalk traffic.

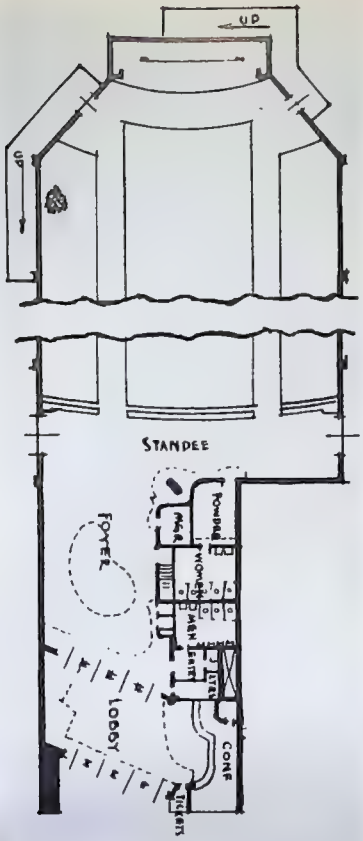
Upper portions of auditorium walls are red damask panels with smaller panels between in brown velour.

REFERENCE DATA

OWNER & OPERATOR: Capital City Theatre Corp.
ARCHITECT: F & Y Building Service, Theatre Division.
SEATING CAPACITY: 1,100.
COST OF BUILDING: $240,000.
COST OF EQUIPMENT: $40,000.

Acoustical Material: Sabanite.
Carpets: Bigelow-Sanford Saxony.
Chairs: Kroehler Mfg. Co. Push-Back.
Curtain Controls & Track: J. R. Clancy, Inc.
Decorator: F & Y Building Service.
Draperies & Stage Curtains: F & Y Building Service.
Generators: RCA Century.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: RCA Brenkert Enarc.
Projection Machines: RCA Brenkert.
Rewinders: GoldE Mfg. Co.
Rubber Mats: Perfo Mat & Rubber Co., Inc.
Screen: B. F. Shearer Co. Starke Cycloramic.
Sign & Marquee: Swanson-Nunn.
Sign Letters: Wagner Sign Service, Inc. 10" Plastic.
Sound: RCA PE-230.
Supply Dealer: Midwest Theatre Supply Co.
Ticket Issuing Machine: Ticket Register Industries.
Vending Machines: C. Cretors & Co. Popcorn.
Wall Fabrics: F & Y Building Service.







THE WAIT FOR SHOW BREAK need not be a tedious one, since a number of comfortable setees are provided behind the standee rail. Serpentine drops on each side of the ceiling contain concealed neon tubing. Three circular wells in the center of the ceiling have indirect neon lighting also and use air diffusers as "bullseyes." Sidewall fixtures in panels complete the lighting plan.





CORNELL •

Burbank, Calif.

A predominantly middle-class populace of approximately 87,000 welcomed the opening of the Burbank on November 18, 1949. As a first-run house in the main business section of the town it features western and action pictures, and commands a graduated price scale ranging from 20 cents for children to 85 cents for adult loge seats.

A double marquee on the front and an impressive sign tower both spell out the name of the theatre forcefully. The facing at one side is cleverly sawtoothed to allow effective staggering of poster cases. A three and one-half acre parking lot adjoins the theatre for patron convenience.

The plain green walls of the lobby and foyer blend effectively with the red, yellow and gray circular pattern of the carpeting Indirect lighting and conditioned air emanate from a huge ceiling oval. A luxurious $10,000 candy stand faces the entrance doors. Red couches are situated at either side of the doors to the men's and ladies' lounges. Individual dressing tables are provided in the latter.

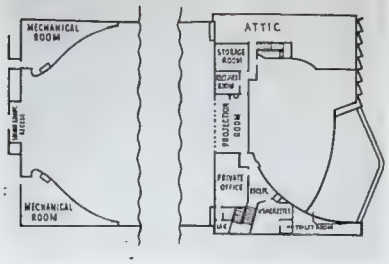
Scattered stars twinkle in the blue ceiling of the auditorium, while ornate scroll work decorates side and front walls. Loge seats are blue, the others red.



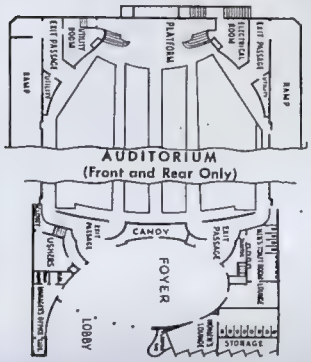
REFERENCE DATA

OWNER & OPERATOR: Principal Theatres Corp. of America.
ARCHITECT: Clarence J. Smale.
SEATING CAPACITY: 1,468.
COST OF BUILDING: $185,000.
COST OF EQUIPMENT (including air conditioning): $100,000.
SIZE OF LOT: 100' x 200'.

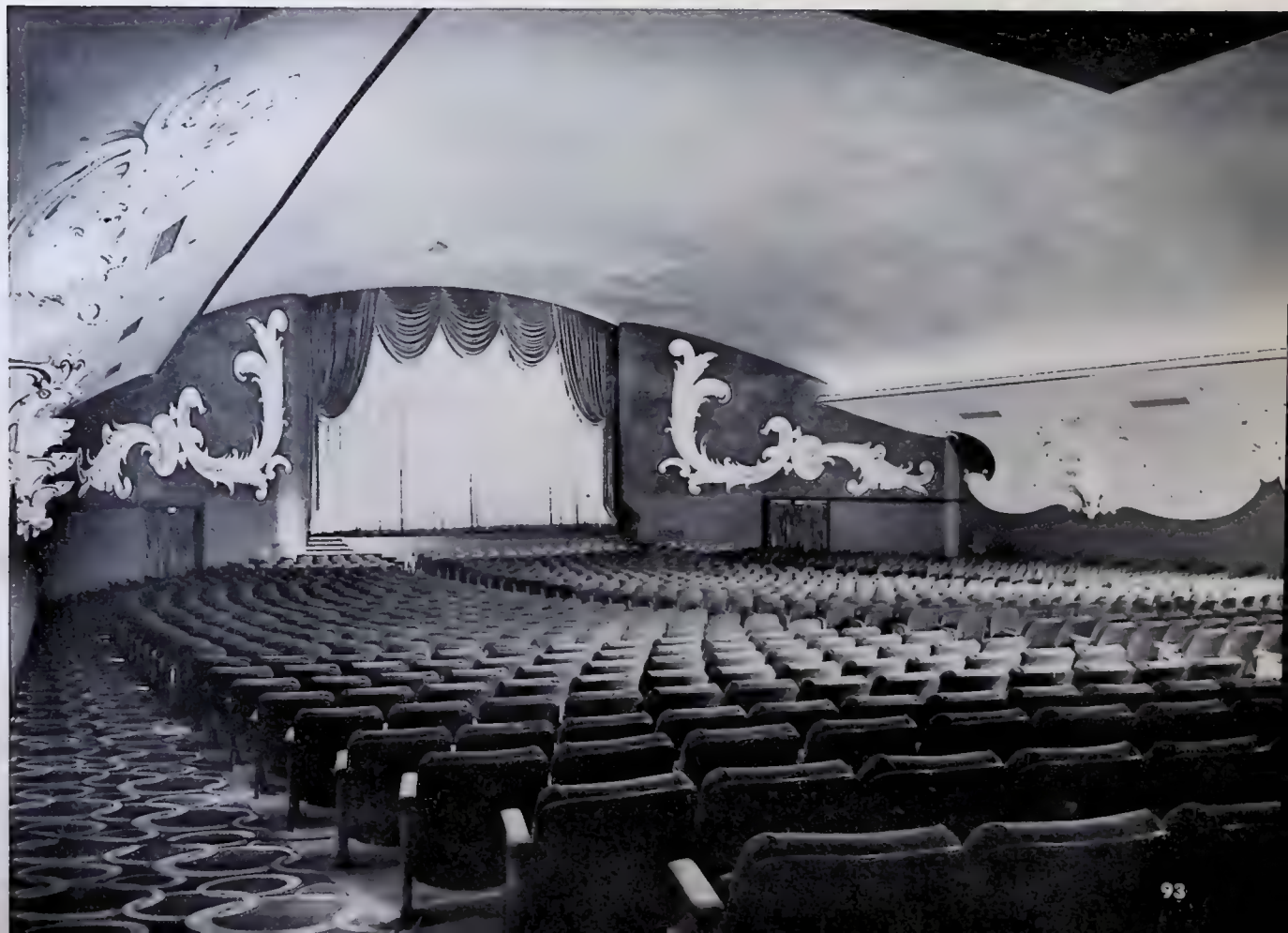
Acoustical Material: Limpet, Asbestos.
Air Conditioning: Chrysler Air-Temp.
Carpets: Alexander Smith & Sons.
Chairs: American Seating Co.
Changeovers: Essannay Electric Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Curtain Controls & Track: Weaver.
Display Frames: Theatre Specialties.
Draperies & Stage Curtains: R. L. Grosh & Sons Scenic Studios.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Rectifiers: McColpin-Christie Corp., Ltd.
Rewinders: GoldE Mfg. Co.
Screen: Walker-American Corp. Plastic.
Sign Letters: Theatre Specialties, Inc.
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.


MECHANICAL ROOM
ATTIC
STORAGE ROOM
PROJECTION ROOM
PRIVATE OFFICE
DOOR
MECHANICAL ROOM

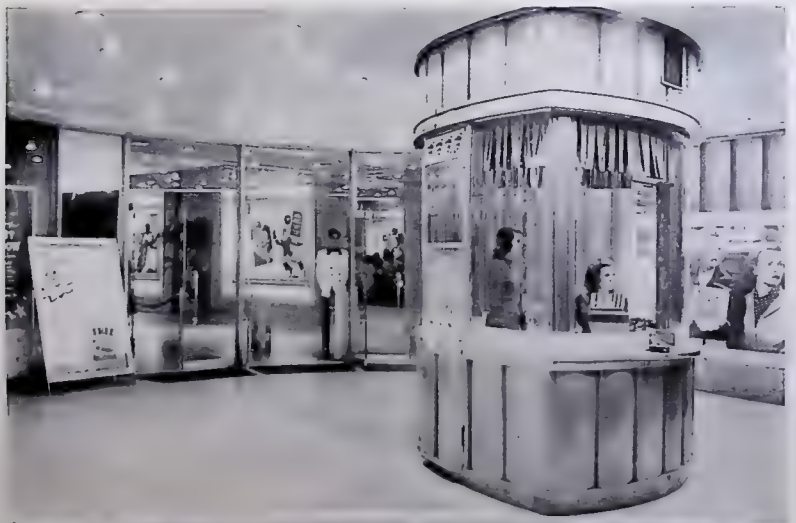



AUDITORIUM
(Front and Rear Only)
PLATFORM
RAMP
RAMP
CANOY
FOYER
LOBBY
STORAGE











MIRACLE •

Coral Gables, Fla.

Admittedly conceived and designed to serve the entertainment needs of an "upper-crust" clientele, the Miracle was opened December 7, 1948, in the exclusive Coral Gables section of the Miami resort area. It shows pictures on a first-run, day-and-date basis with downtown houses to a drawing populace of approximately 250,000.

The front of the building, which is solidly constructed on concrete block, reinforced concrete, and structural steel with Lithibar cast joints, is marked by marble facings, vari-colored metal trims, a regal sign tower atop the marquee, and a "tear drop" type boxoffice.

A service counter, associated with a general lounge immediately off the foyer, serves patrons passing through the lobby as well. The specially designed inlaid foyer carpet matches the terrazzo design in the lobby floor. Both areas are finished in wood veneer, with walls broken into panels for poster cases and mirrors.

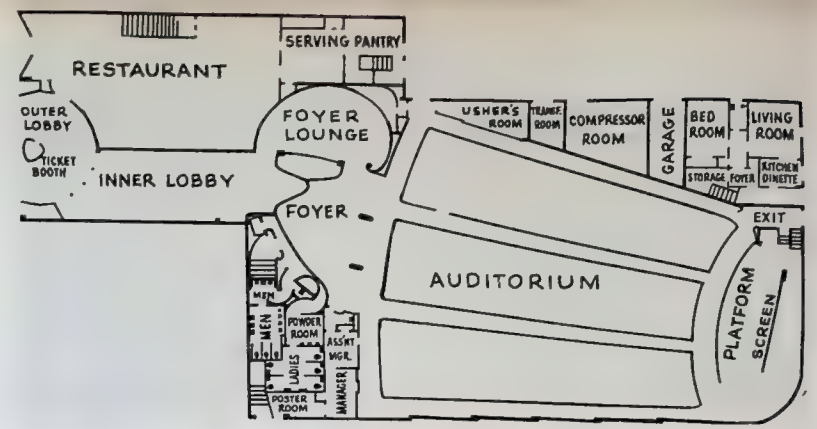
The unique ladies' rest room provides individual compartments containing toilet, basin, dressing tables, etc.

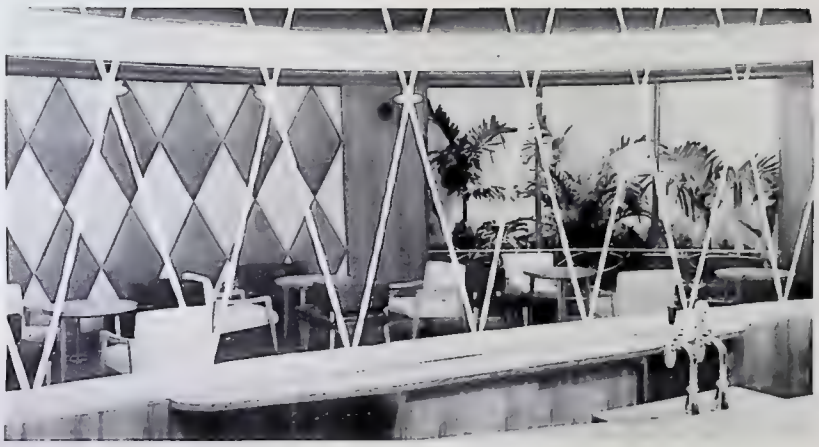
A series of tiers effected with plaster flutings endow the auditorium with an air of intimacy.

REFERENCE DATA

OWNER: Miracle Mile Realty Corp.
OPERATOR: Wometco Theatres.
ARCHITECT: William H. Lee.
SEATING CAPACITY: 1,600.

Air Conditioning: Chrysler Air-Temp.
Carpets: Bigelow-Sanford Carpet Co.
Chairs: Kroehler Mfg. Co. Push-Back.
Changeovers: Weaver Mfg. Co.
Display Frames: Universal Corp.
Draperies & Stage Curtains: Oklahoma City Scenic Co.
Generators: Robin-Imperial.
Lenses: Kollmorgen Optical Corp.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless.
Projection Machines: International Projector Corp. Simplex E-7.
Rewinders: GoldE Mfg. Co.
Screen: Walker-American Corp.
Sign & Marquee: Acolite Neon Sign, Inc.
Sign Letters: Adler Silhouette Letter Co. 10", 17".
Sound: RCA.
Supply Dealer: National Theatre Supply, Wil-Kin Theatre Supply Co., Joe Hornstein, Inc.
Ticket Issuing Machine: General Register Corp. Automaticket.
Vending Machines: Drincolator, Manley, Inc. Popcorn.



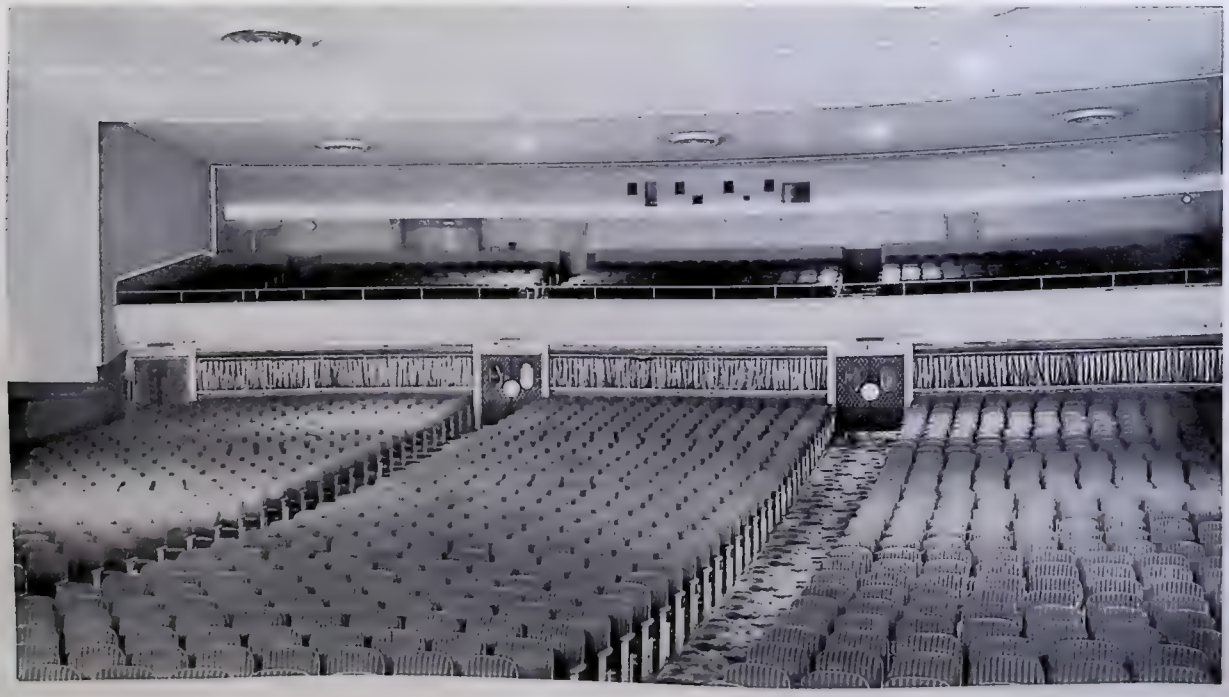


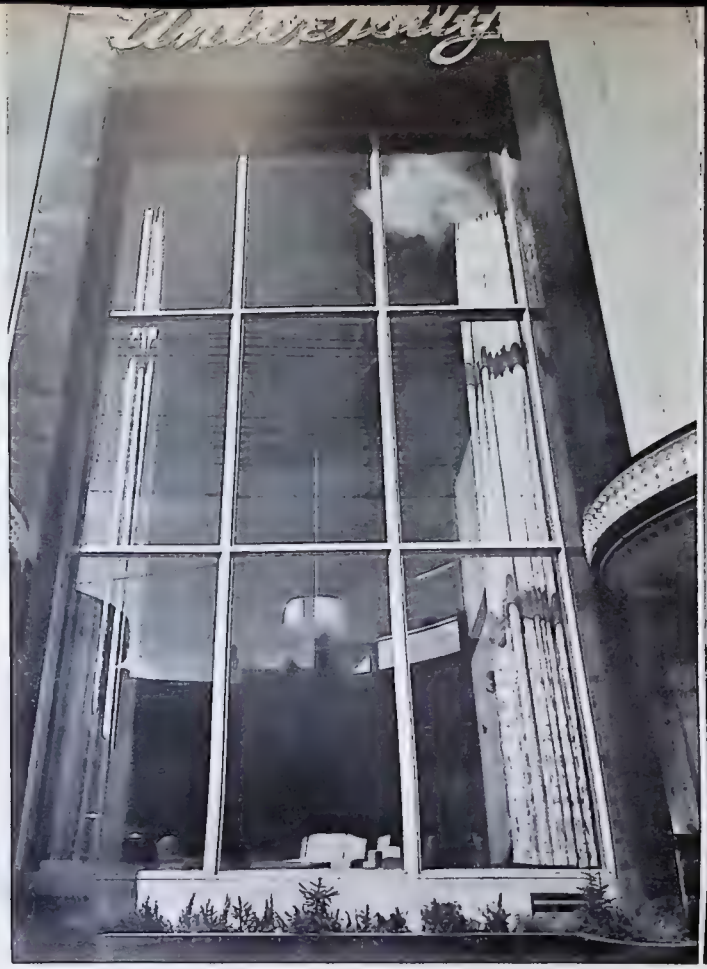
DE LUXE FACILITIES include the fine lounge where coffee is served. A chrome staircase guides patrons to the loge floor. Drinking fountains are mounted at both child and adult heights.





INDIRECT LIGHT SOURCES, which illuminate applied plaster ornamentation at one side of each wall division, are concealed by wainscoting that has been furred out. The coral seating fabric contrasts with the green color of the wall and ceiling. Side walls converge toward screen.









UNIVERSITY •

Toronto, Ontario

Unquestionably one of the most distinctive theatres erected since the war, the University was opened March 25, 1949, in one of Toronto's most elite shopping districts. First-run pictures are shown.

Passersby are immediately attracted by the striking serpentine curved front, which serves as a setting for the giant picture window rising three stories in height. Framed by black granite and silhouetted by neon set in a recess, the window has two "scalloped" marquees on either side in place of the continuous type.

The exterior of the building is faced with Indiana limestone, and blocks of verde antique marble are set in below the marquees. All the metal trim is of stainless steel. An electric sign over the entrance rises to a height of 60 feet.

Plate glass doors lead into the lobby, which, along with the other circulating areas, has been tastefully decorated and furnished in a luxurious manner.

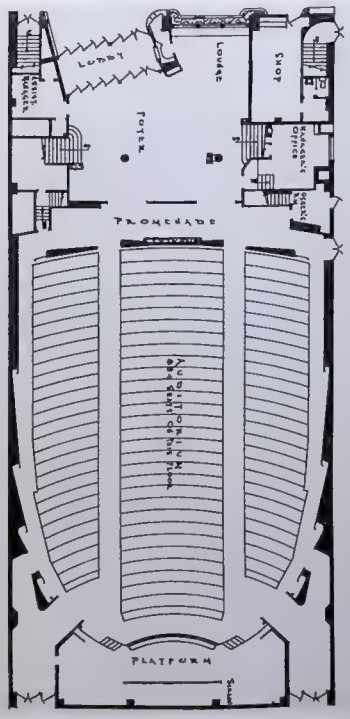
All areas in the theatre have been broken up into smaller units by the use of glass and projectioning partitions. The interior west wall adjacent to the picture window has been covered by a huge mirror to create the illusion of a semi-circular well by reflection.

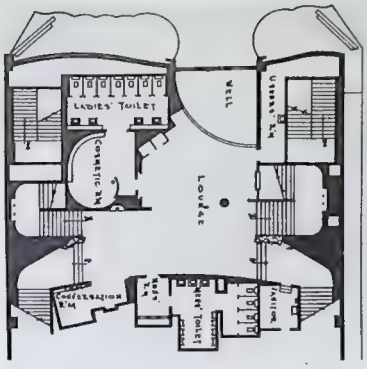
Several lounges, including a television, one, are scattered throughout the theatre. The color scheme throughout the house is red, French gray, and beige.

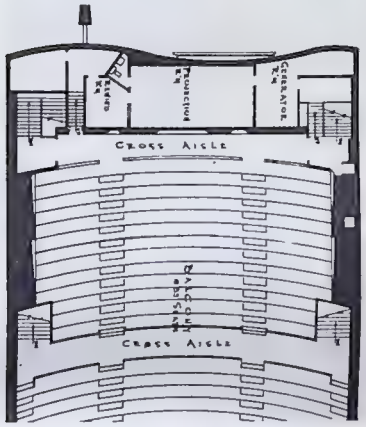




CURVATURE of the drapery "draws" the audience onto the stage. Mirrors top ornamental motif scrolls. Below: Corner of ladies' powder room.







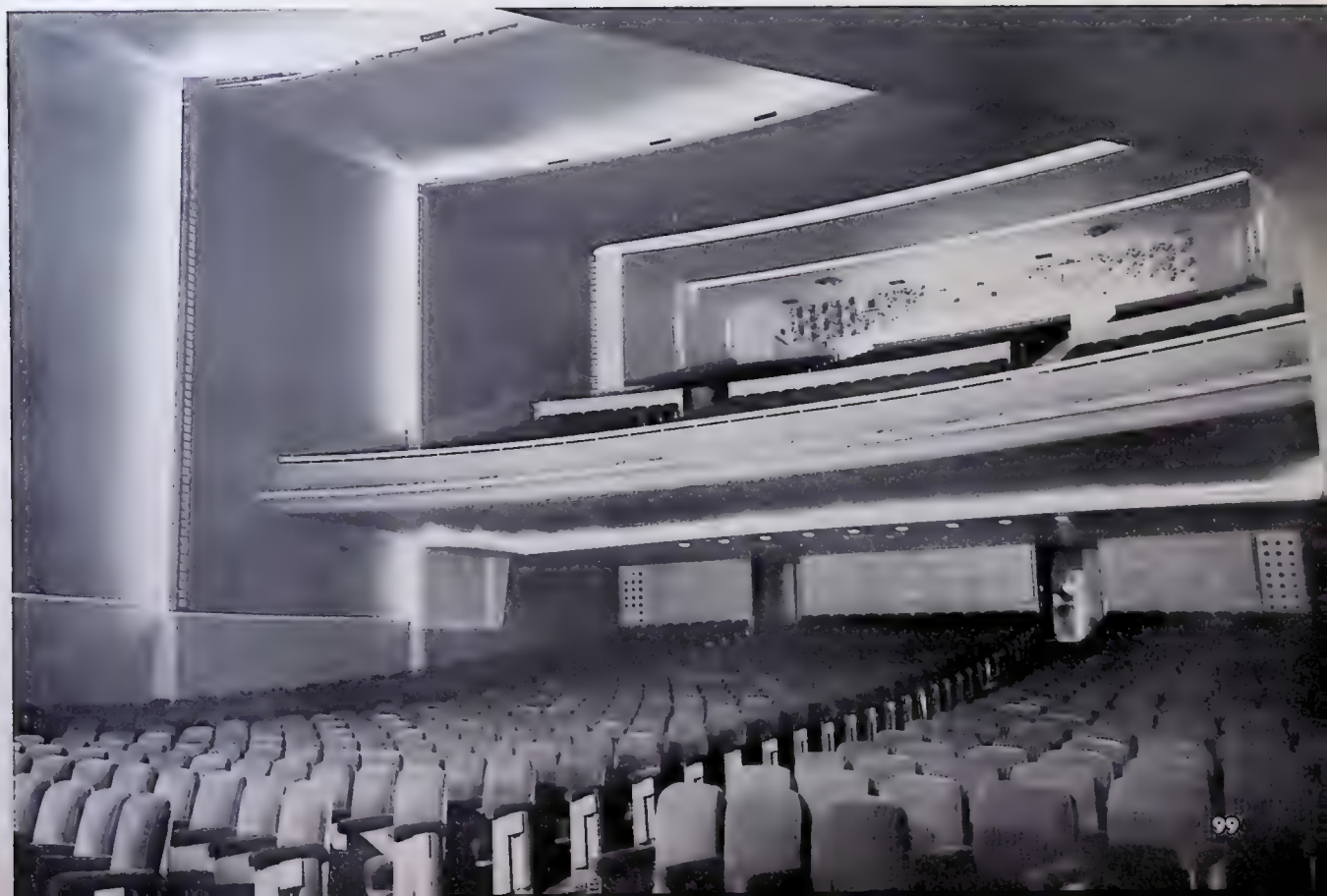
STYLISHNESS characterizes the beautifully appointed mezzanine. Indirect lighting sheds a soft glow over the delightfully simple auditorium.



REFERENCE DATA

OWNER & OPERATOR: Famous Players Canadian Corp., Ltd.
ARCHITECT: Eric W. Hounsom, A. G. Facey, Associate.
SEATING CAPACITY: 1,556.
COST OF BUILDING: Over $600,000.
COST OF EQUIPMENT: $52,000.
SIZE OF LOT: 75′ x 167′.

Acoustical Material: Fiberglas.
Chairs: Kroehler Mfg. Co. Push-Back.
Decorator: Eric W. Hounsom.
Draperies & Stage Curtains: Robert Simpson Co., Ltd.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex.
Screen: Walker-American Corp.
Sign Letters: Adler Silhouette Letter Co. 10″ Aluminum Third Dimension.
Sound: International Projector Corp.
Supply Dealer: General Theatre Supply Co., Ltd.





LINDENHURST •

Lindenhurst, L. I., N. Y.

Opened on Christmas Day, 1948, in a suburban-rural town, this house incorporates structural methods which effect marked efficiency with respect to cost as well as operation. Notable among its distinctions are an upper level of seating without either aisle steps or seating platforms and an air supply duct passing through the roof girders to eliminate the usual boiler room, chimney, and steam pipe, while lowering the roof height also.

The front of building is faced with brick and marble, and the large glass doors are trimmed with aluminum. Free-standing displays replace attraction boards.

A terrazzo green and white floor in the lobby harmonizes well with its marble walls. Natural wood walls, mirrors, and green carpeting embellish the foyer. A candy counter is located at the lounge end. The magenta-shaded walls of the auditorium have panels with vertical cove lights, and the ceiling has downlights.

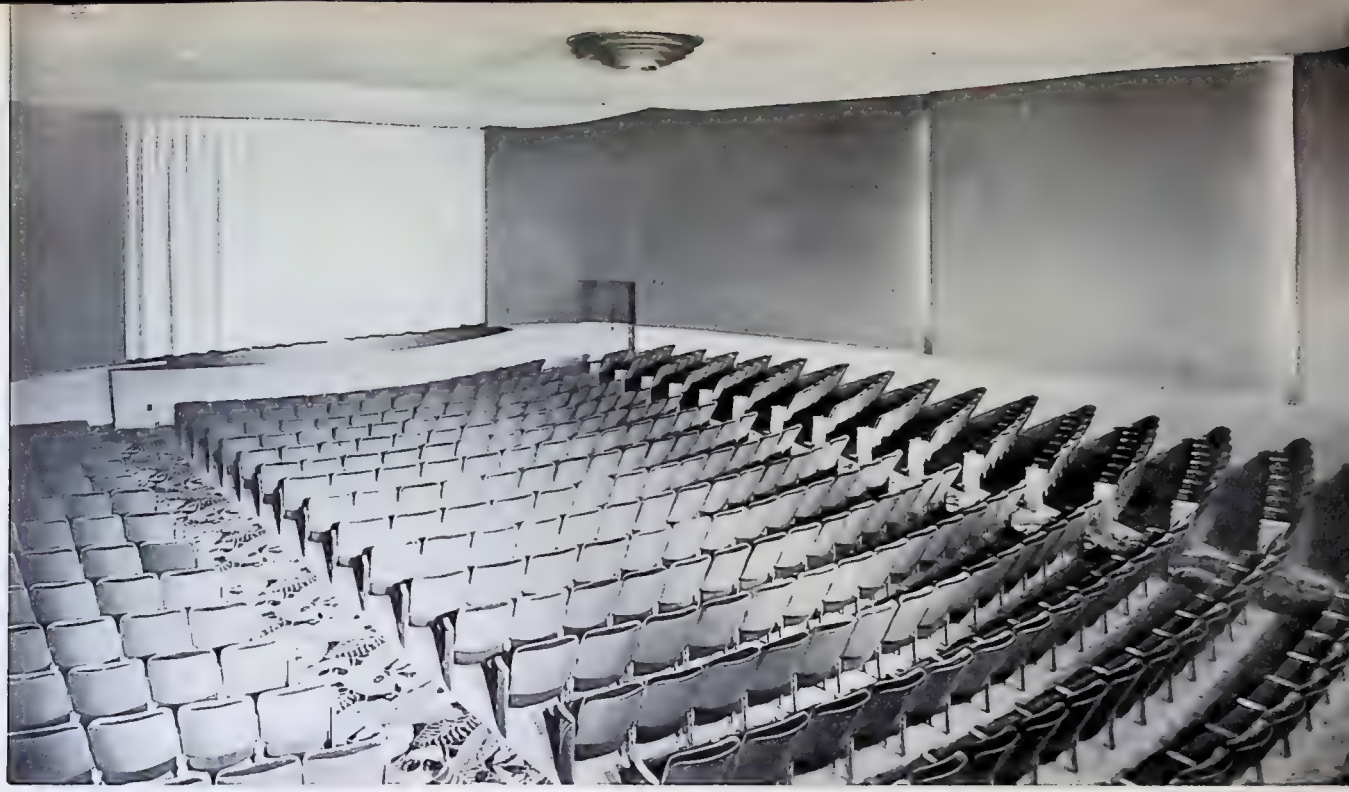


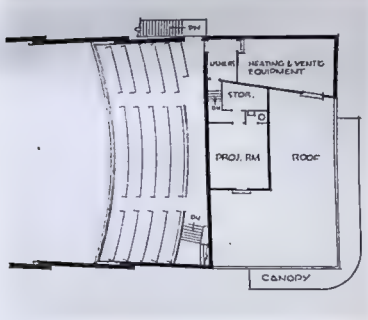


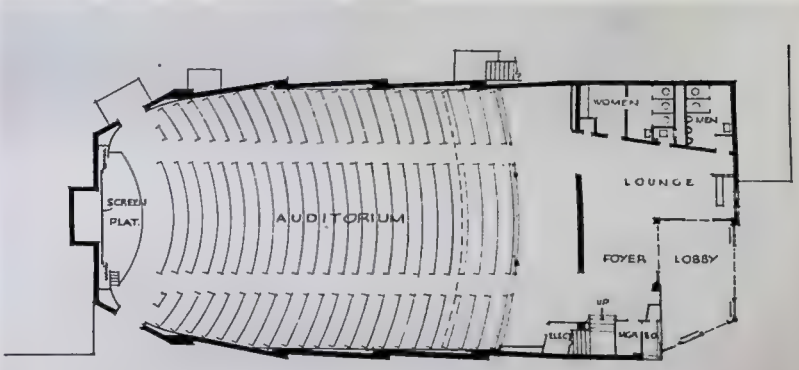
REFERENCE DATA

OWNER: Lindenhurst Theatre Corp.
OPERATOR: Associated Prudential Theatres.
ARCHITECT: Maurice D. Sornik.
SEATING CAPACITY: 780.
COST OF BUILDING: $210,000.
COST OF EQUIPMENT: (including air conditioning): $40,000.

Acoustical Material: National Acoustics.
Carpets: Mohawk Carpet Co.
Chairs: Ideal Seating Co.
Curtain Controls & Track: Vallen, Inc.
Draperies & Stage Curtains: Regal Draperies, Inc.
Rectifiers: RCA.
Lenses: Projection Optics Co., Inc. F 2.0.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless.
Projection Machines: International Projector Corp. Super Simplex.
Screen: Vocalite Screen Corp.
Sound: RCA.
Supply Dealer: Amusement Supply Co., Inc.; Capitol Motion Picture Supply Corp.; Joe Hornstein, Inc.
Ticket Issuing Machine: General Register Corp.
Ticket Chopper: General Register Corp.







A CEILING BREAK near the front of the auditorium contains floodlamps to light the gold cloth screen curtain. Corrugated Transite prevents glare of screen light to loge patrons. Metal acoustic pans, removable for servicing equipment installations above, form the foyer ceiling.







BROOK •

Brook, Ind.

A Hoosier agricultural populace constitutes the bulk of the patronage for the Brook, which was opened July 10, 1949. First-run pictures are played, with the accent on musical comedy and animal shows. Special features, such as the second floor "cry room" and hearing aids, have received much favorable comment.

Economically constructed with Hadite blocks plastered on the inside and water-sealed with cement sealer and venetian paint on the outside, the house has a front of maroon and ivory glazed tiles. The marquee is painted to match.

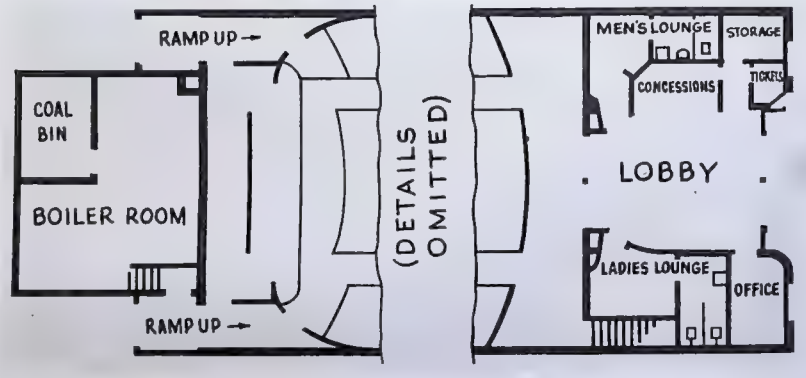
The plastered walls and ceiling of the lobby, which has a candy stand in one corner, are painted blue and red respectively. Rest rooms are similary decorated.

An aqua shade covers the auditorium side walls, while the back wall and ceiling are Spanish buff in color.

REFERENCE DATA

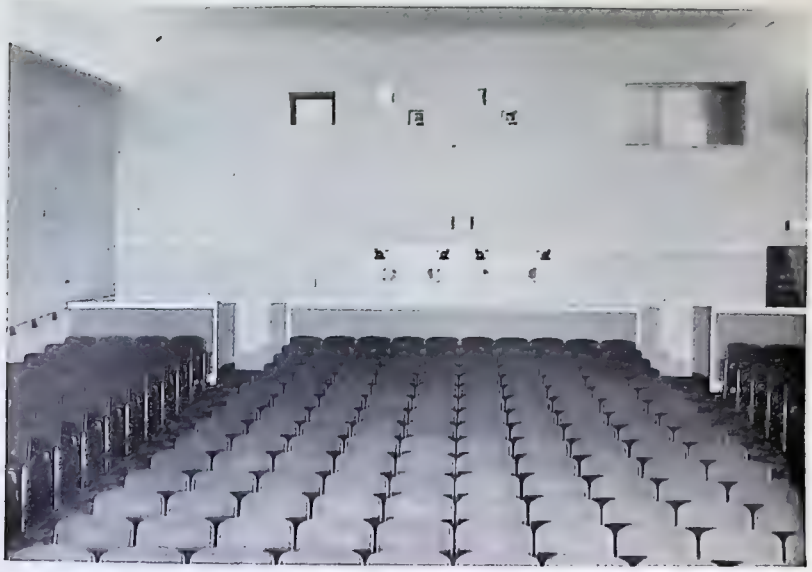
OWNER & OPERATOR: Henry J. & Arve Hermansen.
ARCHITECT: Boyd E. Phelps.
SEATING CAPACITY: 392.
COST OF BUILDING: $61,542.
COST OF EQUIPMENT (including air conditioning): $16,284.
SIZE OF LOT: 42' x 125'.

Acoustical Material: U. S. Gypsum Sabanite.
Carpets: Alexander Smith & Sons Masland.
Chairs: American Seating Co. Bodiform.
Changeovers: Essannay Electric Mfg. Co. Strong "Zipper".
Curtain Controls & Track: Automatic Devices Co. Besteel.
Decorator: "Bill" Curtis.
Draperies & Stage Curtains: National Theatre Supply.
Generators: Hertner Electric Co. Transverter.
Lenses: Bausch & Lomb Optical Co. F 2.0
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Super Simplex.
Rewinders: GoldE Mfg. Co.
Screen: Walker-American Corp.
Sign Letters: Wagner Sign Service, Inc. 8" Red Plastic.
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.



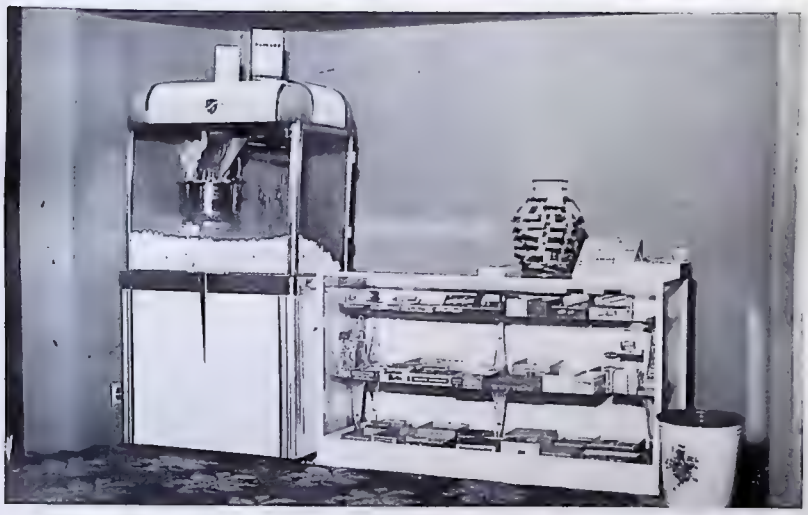








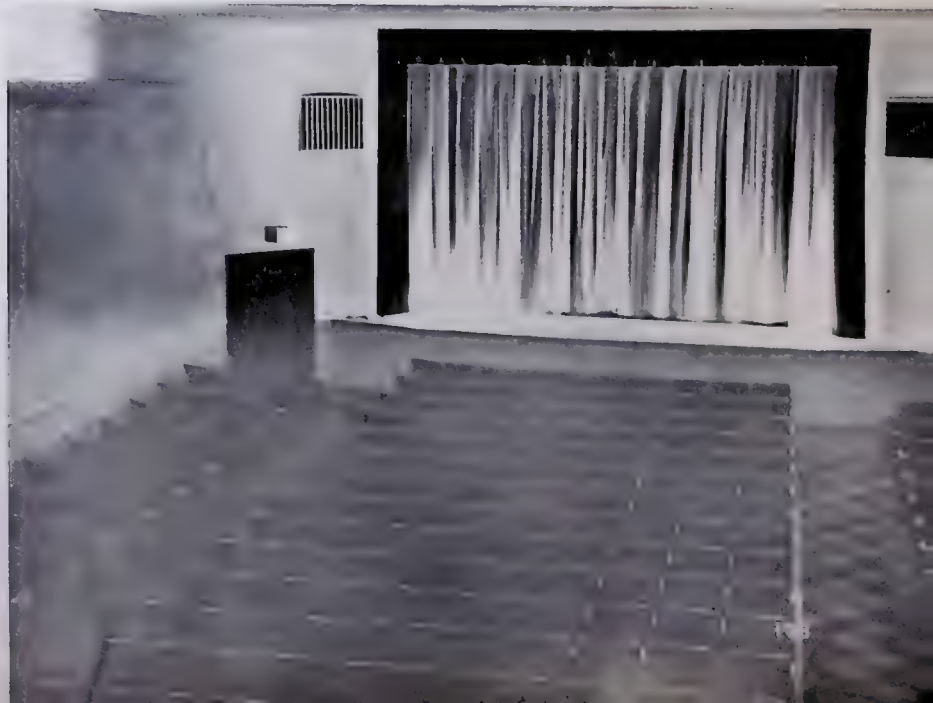






NEON LIGHTING, used in the lobby also, indirectly lights the tastefully simple auditorium. Acoustical plaster aids hearing. Rest rooms are equipped with modern furniture and fixtures.







HUISH •

Payson, Utah

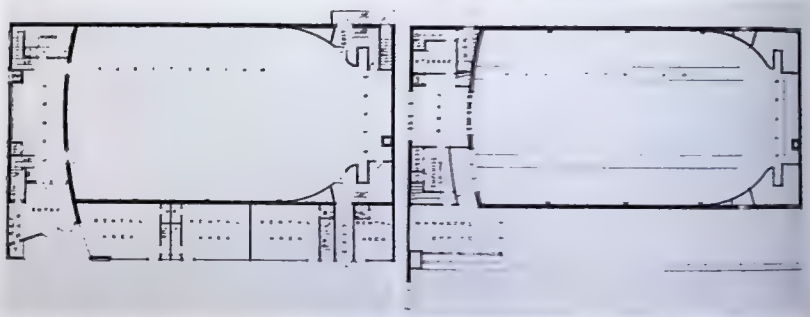
First-run pictures have figured largely in the operating policy of the Huish since its opening April 16, 1949. Located in a main business section of the city, it includes four rental areas for small retail businesses.

In spite of the fact that the theatre is designed from a modernistic point of view, a rustic touch is achieved through the use of native sandstone and redwood.

The boxoffice is situated at the side of the glass front entrance doors. Neon strip lighting provides night brightness.

One of the house's most striking features is an 18-foot long mural in the inner foyer. Beveled advertising frames contrast with the modern motif exemplified by the richly carpeted floor and indirect lighting. Built-in furniture in the lounges and a candy stand are other assets.

Auditorium walls are neutral gray textured plaster with indirect colored lighting in coves at top of sidewall wainscoting. A "cry room" is located on the second floor of the building.







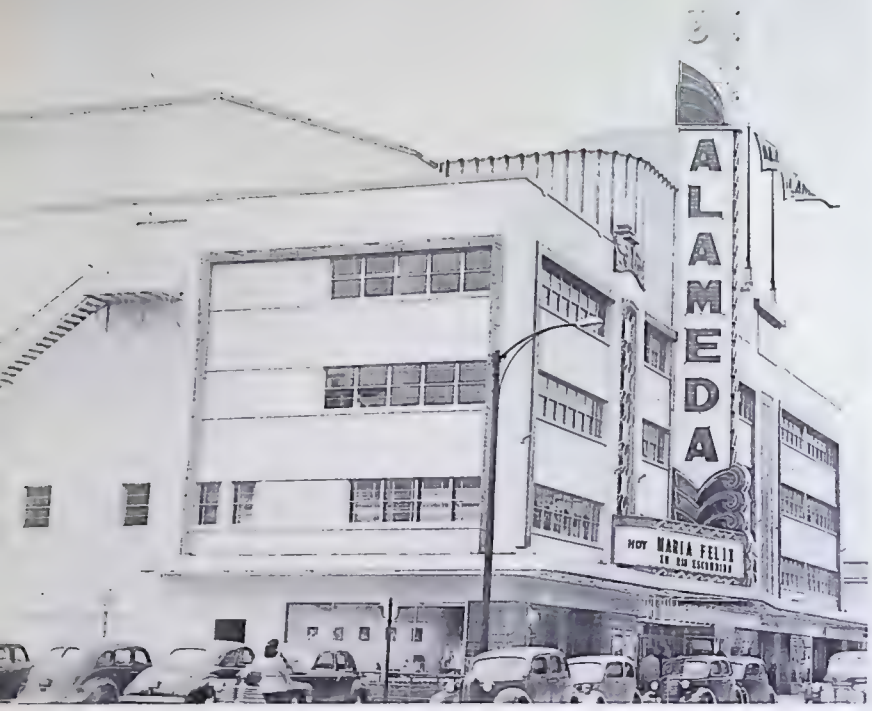


REFERENCE DATA

OWNER & OPERATOR: Huish-Gilhool Theatre Enterprises.
ARCHITECT: Fred L. Markham, W. Rowe Smith, Associate.
SEATING CAPACITY: 816.
COST OF BUILDING: $135,000.
COST OF EQUIPMENT (including air conditioning) $35,000.
SIZE OF LOT: 78′ x 129′.

Carpets: Alexander Smith & Sons Crestwood.
Chairs: International Seat Co.
Changeovers: Dowser Mfg. Co.
Curtain Controls & Track: Vallen, Inc.
Decorator: Harry Hawthorne.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: J. E. McAuley Mfg. Co.
Projection Machines: International Projector Corp.
Rectifiers: McColpin-Christie Corp.
Rubber Mats: U. S. Rubber Co.
Screen: Walker-American Corp.
Sign Letters: Wagner Sign Service, Inc.
Sound: Western Electric.
Supply Dealer: Intermountain Theatre Supply Co.







ALAMEDA •

San Antonio, Tex.

A notable experiment in theatrical internationalism, the de luxe Alameda is designed in the coloring and architecture of both old and new Texas and Mexico. It was opened on March 9, 1949, with a seven-day-run policy of Spanish language film showings. In addition to the theatre, the building houses offices, a radio station, and an auditorium.

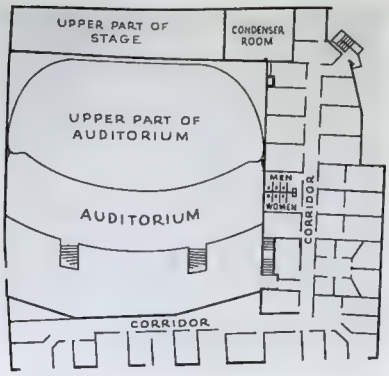
The cream stucco exterior, trimmed in light blue terra cotta with aluminum windows and rich ornamentation, is highlighted by an 86-foot sign tower rising upward from the marquee. Cold cathode lights in several colors provide illumination.

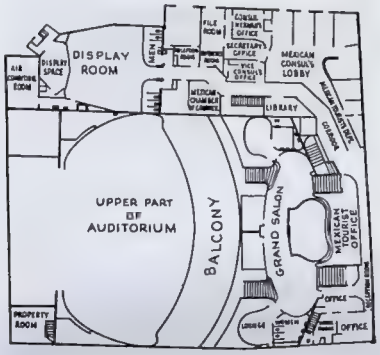
Walls of the beautifully carpeted and decorated main lobby are mirrored except for a central motif of aluminum sculptured dancing figures on a green plaster background which has been neonized. A fully equipped refreshment counter and a battery of telephones are situated at the east side of the lobby. Toilet rooms have tile floors and walls with built-in powder counter and stools in ladies' room.

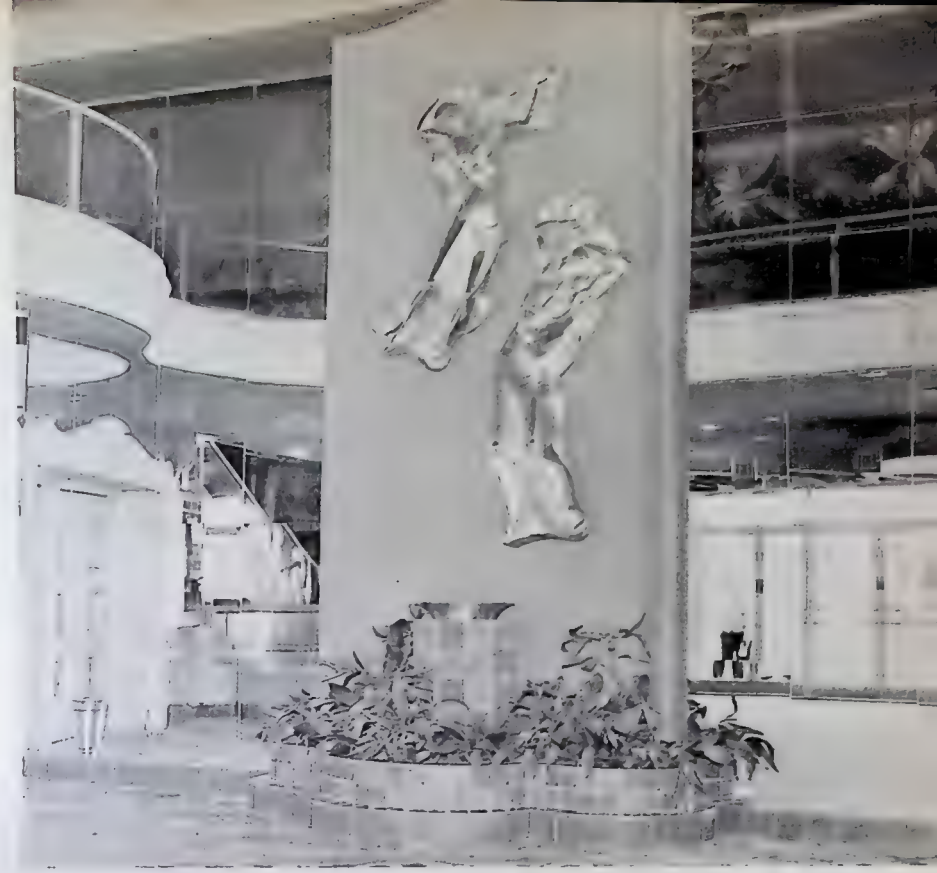
Railings on the mezzanine staircase are aluminum and plexiglas, carved and edge-lighted. Inside panels are Florentine glass with aluminum leaved between. Mezzanine walls are plaster decorated in magenta background with tropical murals. Illuminated drinking fountains and lighted easel display frames are at each end.









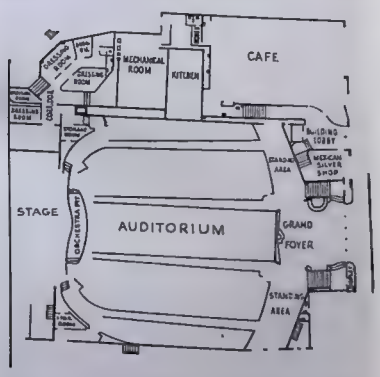


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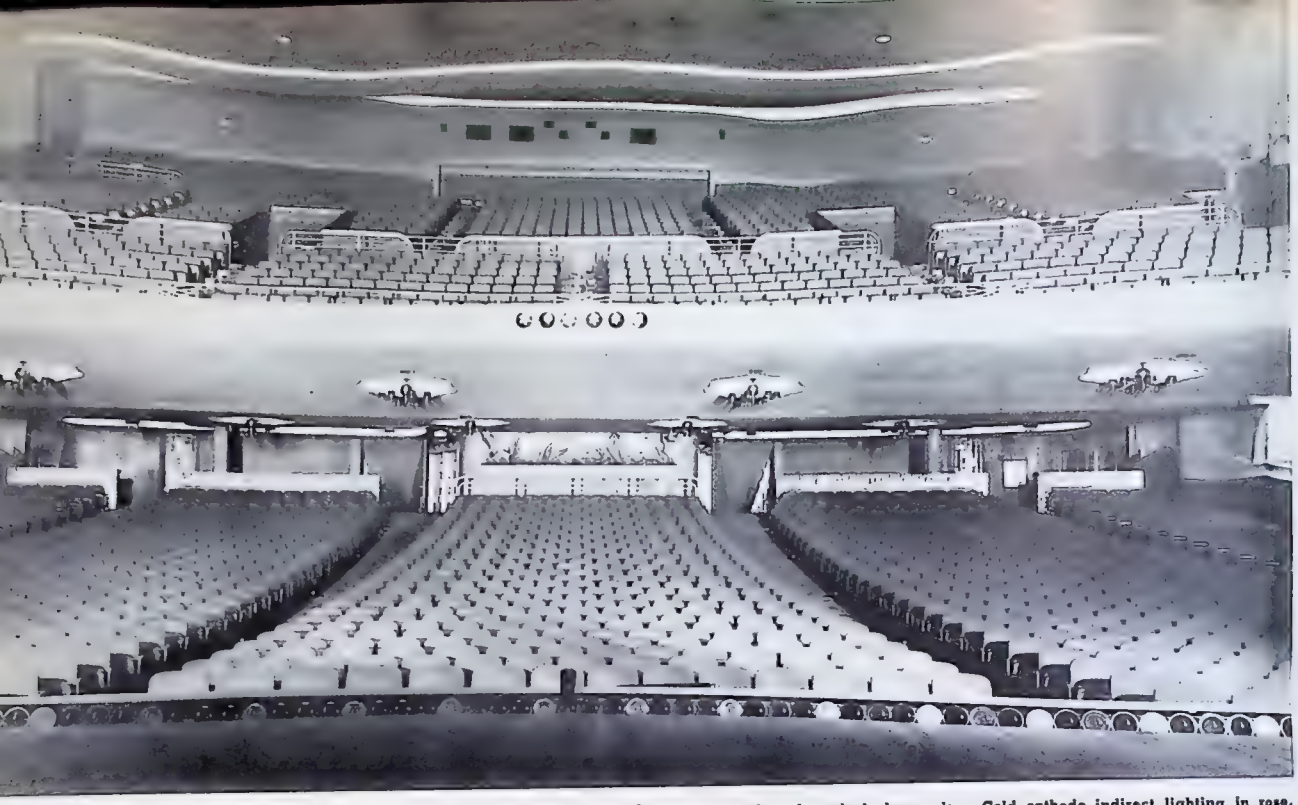
OWNER & OPERATOR: Gaetano A. Lucchese.
ARCHITECT: N. Straus Nafach (deceased).
SEATING CAPACITY: 2,462.
COST OF BUILDING: $1,350,000.00.
COST OF EQUIPMENT: $167,358.92.

Acoustical Material: Acoustic Plaster.
Air Conditioning: Chrysler Air-Temp.
Carpets: Alexander Smith & Sons Carpet Co.
Chairs: American Seating Co. Bodiform.
Changeovers: Weaver Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Curtain Controls & Track: J. R. Clancy, Inc.
Decorator: Hans R. Teichert.
Display Frames: Universal Corp. Sealuxe.
Draperies & Stage Curtains: Premier Studios.
Generators: Hertner Electric Co. CP 250-375.
Lenses: Bausch & Lomb Optical Co. Super Cinephor 4.0.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Hy-Candescent.
Projection Machines: International Projector Corp. Simplex E-7.
Rewinders: GoldE Mfg. Co. Model DH.
Rubber Mats: American Mat Corp.
Screen: Walker-American Corp.
Sign Marquee: Shelnutt Neon Sign Co.
Sign Letters: Theatre Specialties, Inc., Bevelite 10", 17".
Sound: International Projector Corp. Simplex 4 Star.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.

FLOOR PLANS show the impressive extent of the building's facilities. The graceful sculptured figures are lighted from the well on the floor line as well as from the rear. The mezzanine is luxuriously furnished and lighted.







SCROLL PLASTER ORNAMENTATION on either side of the stage accents the graceful folds of the contour curtain. An orchestra pit enables the presentation of musical shows also. Cold cathode indirect lighting in rose, blue, white, and yellow colors blends with the "black-lighted" murals.





RICHMOND •

Cleveland, Ohio

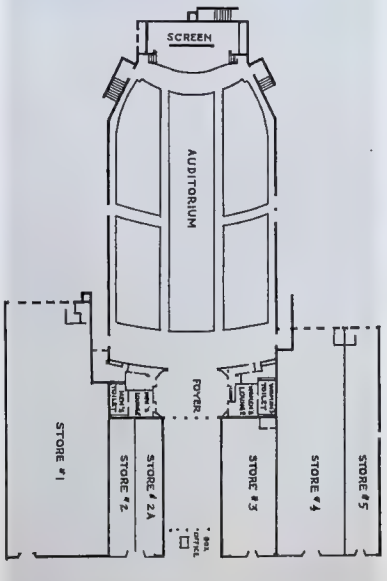
This large, single-feature, 50-cent admission theatre is dedicated to the service of an upper middle class patronage so that its construction and appointments are deluxe in every respect. The front is massive in gray cast stone, and is dominated by a well proportioned marquee and name sign.

A long and wide inner lobby has contrasting wall treatments above the neutral wainscot, one carried out in green velour with a fine line baroque design of white tubing, while the other is in tufted black patent leather and white buttons framing a large baroque outlined advertising area.

Centered in the inner foyer is a large circular settee upholstered in white patent leather and holding in its crater a green plastic floral display. The side wall confection stand is framed in white and its base is attractive in tufted white leather. On the opposite wall is a huge specially designed couch following the same general baroque scheme. Red, gray and black figured carpeting from wall to wall ties together the decorative units.

Auditorium sidewalls are treated with a combination of emerald green satin and gray velour with large white lighted plaster ornaments as the only accents. Stage draperies and draw curtains pick up the same color blends and ornament.

Lounge and service rooms are richly modern in decoration and furnishings. This theatre also boasts of a paved parking lot big enough to accommodate 1,000 cars and with a uniformed attendant in charge to insure smooth operation.

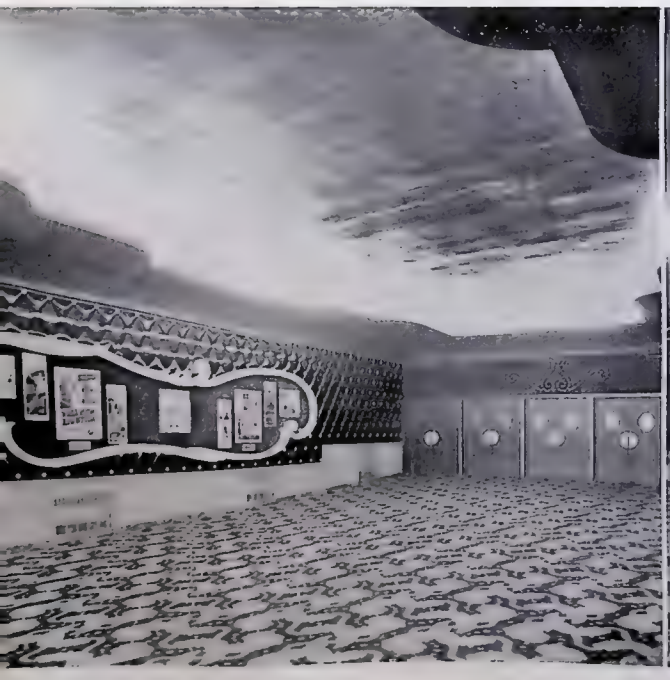


REFERENCE DATA

OWNER: Community Circuit.
OPERATOR: Richmond Theatre Co.
ARCHITECT: Weinberg, Laurie & Teare.
SEATING CAPACITY: 1,800.
COST OF BUILDING (including air conditioning): $350,000.
COST OF EQUIPMENT: $150,000.
SIZE OF LOT: 900′ x 425′.

Acoustical Material: Acoustic Plaster.
Carpets: A. & M. Karagheusian, Inc.
Chairs: American Seating Co. Bodiform.
Changeovers: Weaver Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Curtain Controls & Track: Vallen, Inc.
Decorator: Blaine Perrigo-Ben Sternberg & Associates.
Display Frames: Poblocki & Sons.
Scenic Studios, Inc.
Generators: Hertner Electric Co.
Draperies & Stage Curtains: Novelty
Lenses: Bausch & Lomb Optical Co. Super Cinephor.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Screen: Walker-American Corp. Plastic.
Sign Letters: Theatre Specialties, Inc. 10″ Bevelite.
Sound: International Projector Corp.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp.
Ticket Chopper: GoldE Mfg. Co.
Wall Fabrics: Novelty Scenic Studios, Inc.

INDIRECT LIGHTING through dropped and scallop-edged ceiling coves is common to both the auditorium and lobby, with more severe straight-edged coves in the foyer. Rear wall of the auditorium is covered with alternating stripes of emerald green satin and gray velour, and the chairs are upholstered in red with gray and red striped end standards. The plaster ornamentation on the side walls adds a simple, yet effective, charm.









THE RICHMOND, Cleveland, Ohio can boast of many fine decorative expressions. The ladies' lounge is walled in alternating stripes of gray and chartreuse, with black lamps, gray tables and chairs upholstered in chartreuse fabrics. The free-sweeping wall ornaments in the auditorium serve to highlight the quieter tones of the necessary large wall surfaces. The clean whiteness of the settee and the candy stand beckons invitingly.





ODEON •

Brantford, Ontario

Construction is of reinforced concrete, tile and face brick, and a steel roof.

Front is of buff face brick laid in pattern with cast stone trim, and incorporates a vertical steel column name sign and angular attraction board.

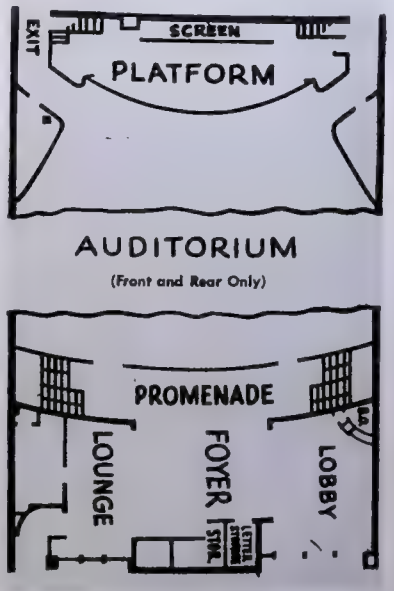
An outer lobby, with terrazzo floors and walls of rose and green with a section of reeded birch surrounding the display frames, leads into a foyer carpeted from wall to wall in a sand and blue pattern. Advantageously spotted in a side wall is a modern confection bar in natural wood.

Proper acoustics in the auditorium are obtained through the use of pre-cast plaster flutes arranged in two huge wings that terminate in the up-swing of the balcony facia, and by a rear-wall, under-balcony plaster sound diffuser.

The color scheme is turquoise with the main draw and side curtains in a gold flowered pattern, legs and borders in deep green, and a silver satin screen curtain. Chair upholstery is red.

Designed as a downtown first-run, this new Odeon is a modern, well-equipped small theatre for an urban populace.







REFERENCE DATA

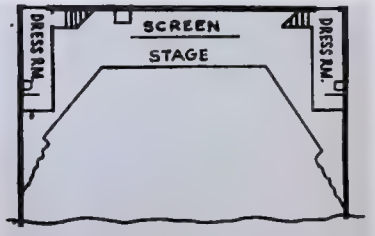
OWNER & OPERATOR: The Odeon Theatres (Canada), Ltd.
ARCHITECT: Jay I. English, (deceased), J. Leslie Kemp.

SEATING CAPACITY: 998.

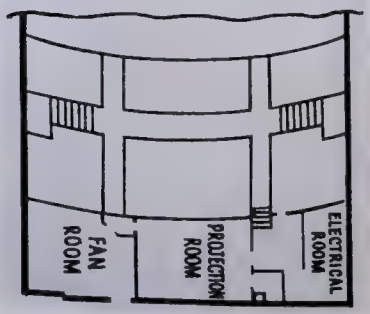
Coinchanger: Johnson Fare Box Co.
Projection Lamps: Gaumont-Kalee "16".
Projection Machines: Gaumont-Kalee "19".

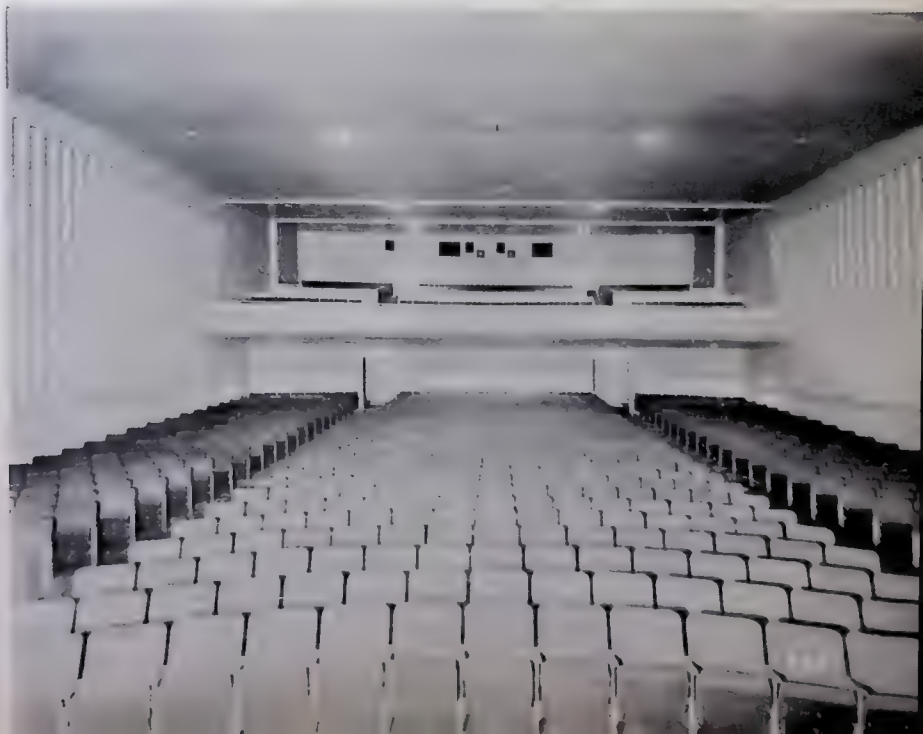
Rewinders: Wenzel Mfg. Co.
Screen: Gaumont-Kalee.
Sign Letters: Adler Silhouette Letter Co. 3rd Dimensional.
Sound: Gaumont-Kalee.
Supply Dealer: Gaumont-Kalee, Ltd.

OVER THE PROSCENIUM the fluted precast plaster inserts of the side wall treatment are repeated in a ceiling section. The small balcony is equipped for smoking, and seats are spaced 36 inches from back to back. Except for some indirect cove lighting at the proscenium end, all illumination for either work or running is through ceiling downlights of varying intensities. The theatre is air conditioned.



AUDITORIUM







BRONSON •

Bronson, Mich.

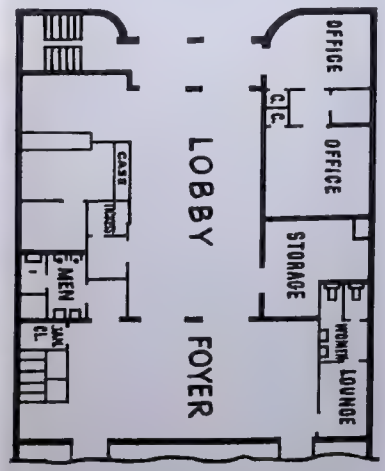
Built of reinforced cinder block, steel trusses and a steel roof-deck, the Bronson is intended for an industrial and farming community where it plays first-run product for a 44-cent admission. The modern front is faced with buff glass into which has been introduced a black glass trim, central set-back panels of red glass, and a well-balanced marquee. Night lighting is effective.

At one side of the relatively simple lobby is a most unusual snack bar complete with permanent stools and located in relation to the boxoffice so that it can cater to casual walk-ins as well as paying patrons.

The auditorium is also very simple in its decorative theme, but is efficiently modern and air conditioned. Above a beige wainscot, medium green and blue painted walls work up to a darker blue ceiling around which runs a huge oval gold edged light trough. Central ceiling areas inside the trough are in constantly diminishing shades of blue. Ladies' and men's lounges are painted in colorful tones and have built-in settees.

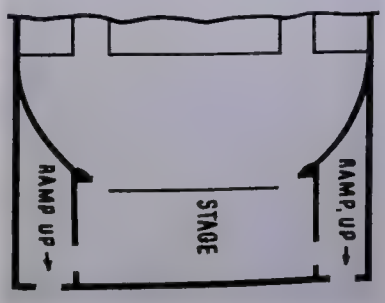
On the second level is a "cry room" complete with play pen, and ample parking areas are in the rear. Here is a well ordered and modern smaller theatre of charm and operating efficiency.

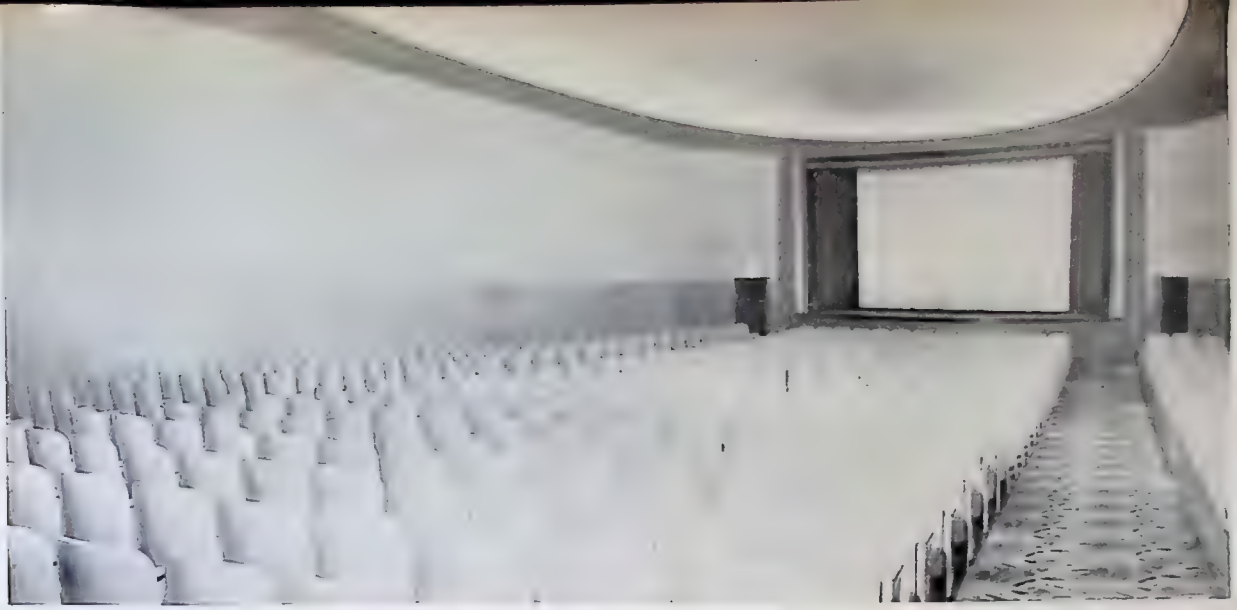




AUDITORIUM
(Front and Rear Only)









THEATRE CHAIRS are upholstered in beige, and large figured carpeting is in beige and blue.



REFERENCE DATA

OWNER & OPERATOR: E. J. Pennell.
ARCHITECT: Peter DeVos.
SEATING CAPACITY: 606.
COST OF BUILDING: $120,000.
COST OF EQUIPMENT (including air conditioning) : $65,000.
SIZE OF LOT: 50′ x 325′.

Carpets: Alexander Smith & Sons Carpet Co. Crestwood.
Chairs: Ideal Seating Co.
Coinchanger: Johnson Fare Box Co.
Decorator: Norman Taylor.
Display Frames: Poblocki & Sons.
Generators: Hertner Electric Co. 50-100 amp.
Lenses: Kollmorgen Optical Corp. Super Snaplite F 1.9.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Rewinders: GoldE Mfg. Co.
Screen: Walker-American Corp. Plastic.
Sign & Marquee: Lucas Neon Sign Co.
Sign Letters: Wagner Sign Service, Inc. 10″ Aluminum.
Sound: International Projector Corp. Simplex A-30.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.
Vending Machines: Manley, Inc. Popcorn. Coca-Cola, Bastian-Blessing.







HI-WAY •

Stratford, Conn.

As an old, medium-sized suburban theatre commanding a 50-cent top admission, this new showplace has been completely remodeled so that little of the original remains. The front is effective in white painted brick, verde antique marble, and natural stained pine siding interestingly worked together.

Clear glass doors lead into a shelter lobby, the ceiling of which is a lighter tone of the blue of the marquee soffit. Walls are mirrored to add the effect of size, and the entrance doors are painted lime yellow. As the entrance is at right angles to the auditorium, a large oval foyer results.

The auditorium ceiling is in burgundy, and the sidewalls are covered with a blue-gray velour over rock wool bats. Framing the proscenium are planes of deep blue, and the main draperies and draw curtains are in contrasting tones. Major ornamentation is gained from the large figured colorful carpeting from wall to wall in the foyer and down the auditorium aisles.

A large corrugated glass panel frames the modern confection stand.

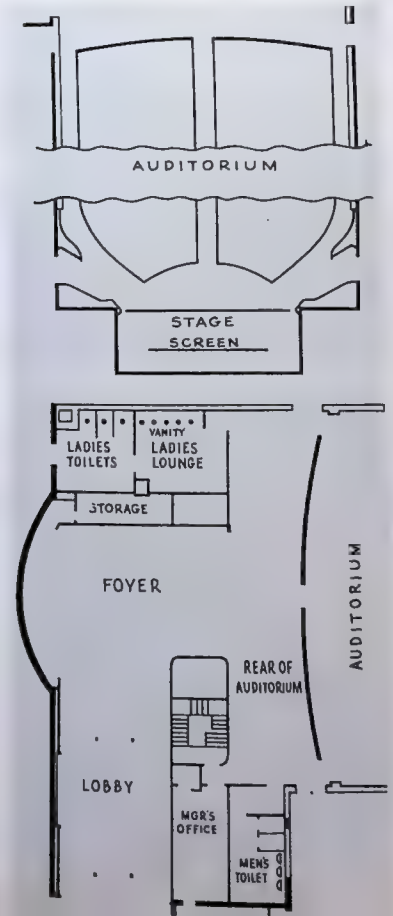
REFERENCE DATA

OWNER & OPERATOR: Peter Perakos.
DESIGNER: William Riseman Associates.
SEATING CAPACITY: 987.
COST OF BUILDING: $185,000.
COST OF EQUIPMENT: $60,000.

Acoustical Material: Rockwool, Plaster.
Air Conditioning: General Electric Co.
Carpets: Alexander Smith & Sons Carpet Co.
Chairs: Kroehler Mfg. Co. Push-Back.
Changeovers: Weaver Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Curtain Controls & Track: Vallen, Inc.
Decorator: William Riseman Associates.
Draperies & Stage Curtains: Joseph Dobesch.
Generators: Hertner Electric Co.
Lenses: Kollmorgen Optical Corp.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless.
Projection Machines: International Projector Corp. Simplex E-7.
Screen: Walker-American Corp.
Sign Letters: Wagner Sign Service, Inc.
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.



SIDE AISLE PASSAGEWAYS are bridged and separately lighted, thereby permitting a minimum of general illumination in the auditorium.







PARSONS •

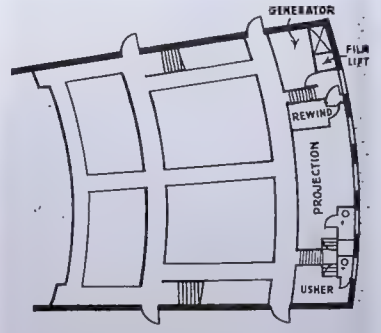
Flushing, N. Y.

Unusual in many respects is this new suburban theatre which commands a 50-cent admission scale.

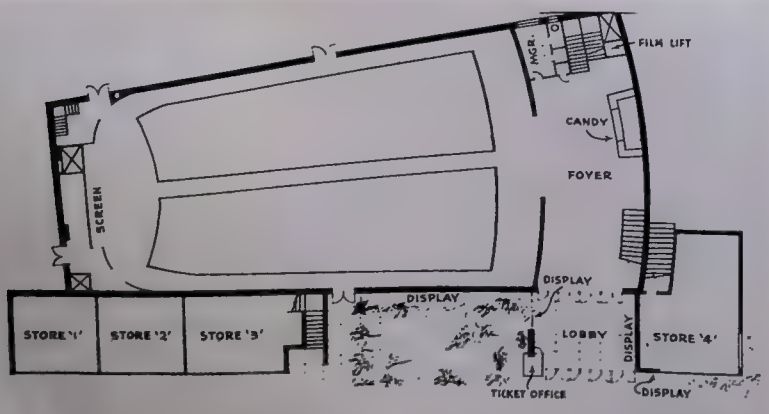
While part of a project that includes four stores, the front has been handled in a separate informal manner that is a credit to its importance to the success of the whole. Faced with crab orchard stone, the blue porcelain soffit carries into the lobby past clear glass sectional panels and Herculite glass doors. The black terrazzo-floored and stone-surfaced lobby extends into a carpeted and richly furnished foyer with walls of blue and coral stucco.

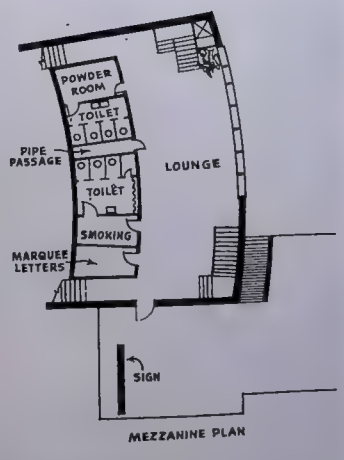
In the auditorium a tinted acoustic plaster ceiling caps walls of coral stucco without a wainscot or base of any kind. The only relief are ornamental plant boxes on either side wall and a colorful figured main curtain combined with small figured aisle carpeting.

A small elevator or film lift has been installed from street level to booth; and, again in the interest of efficient management, the changeable letter sign is serviced from the roof of the lobby without sidewalk impediment.



BALCONY PLAN



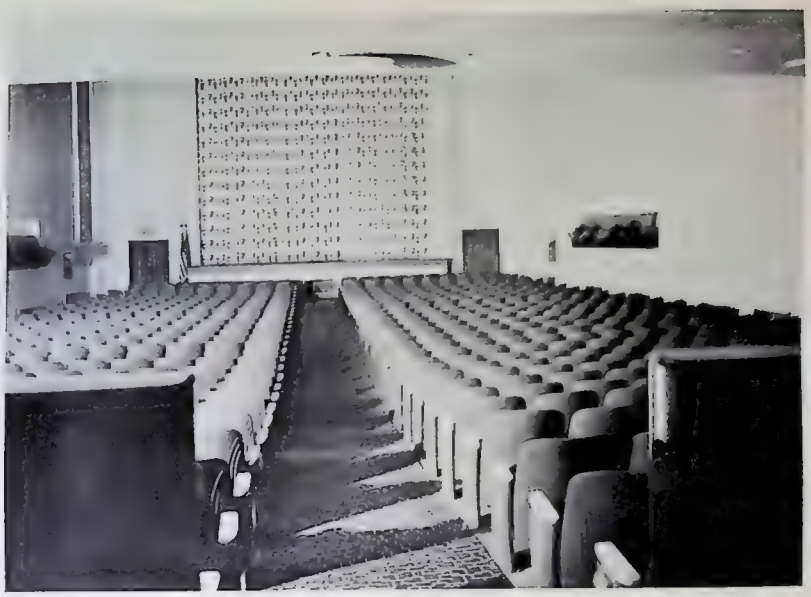


MEZZANINE PLAN

REFERENCE DATA

OWNER: Northcrest Gardens, Inc.
OPERATOR: Interborough Circuit, Inc.
ARCHITECT: Samuel Lewis Malkind.
SEATING CAPACITY: 1,080.
COST OF BUILDING: $250,000.
COST OF EQUIPMENT: $60,000.
SIZE OF LOT: 100′ x 185′.

Acoustical Material: U. S. Gypsum Sabinite.
Carpets: A. & M. Karagheusian, Inc.
Chairs: Heywood-Wakefield Co.
Coinchanger: Brandt Automatic Cashier Co.
Curtain Controls & Track: Automatic Devices Co.
Decorator: Continental Painting Corp.
Draperies & Stage Curtains: Manhoff Studios.
Generators: Hertner Electric Co.
Lenses: Bausch & Lomb Optical Co. F 1.
Lighting Fixtures: Century Lighting, Inc.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Rewinders: GoldE Mfg. Co.
Rubber Mats: Lorraine Rubber Eng. Corp.
Screen: B. F. Shearer Co. Starke-Cycloramic.
Sign & Marquee: Continental Sign Co.
Sign Letters: Adler Silhouette Letter Co. 10″, 12″, 14″, 16″.
Sound: RCA.
Supply Dealer: National Theatre Supply, Joe Hornstein, Inc., Amusement Supply Co.
Ticket Issuing Machine: General Register Corp.
Ticket Chopper: General Register Corp.





A SPACIOUS LOUNGE on the second level serves the balcony and loge, much of which extends back over the entrance chambers. On this level also are the ladies' and men's suites which are tastefully painted and equipped.





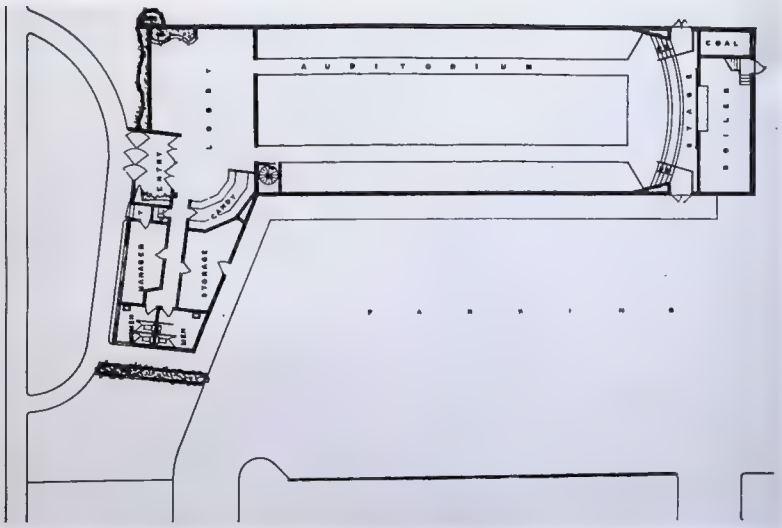
ARCH •

Spanish Fork, Utah

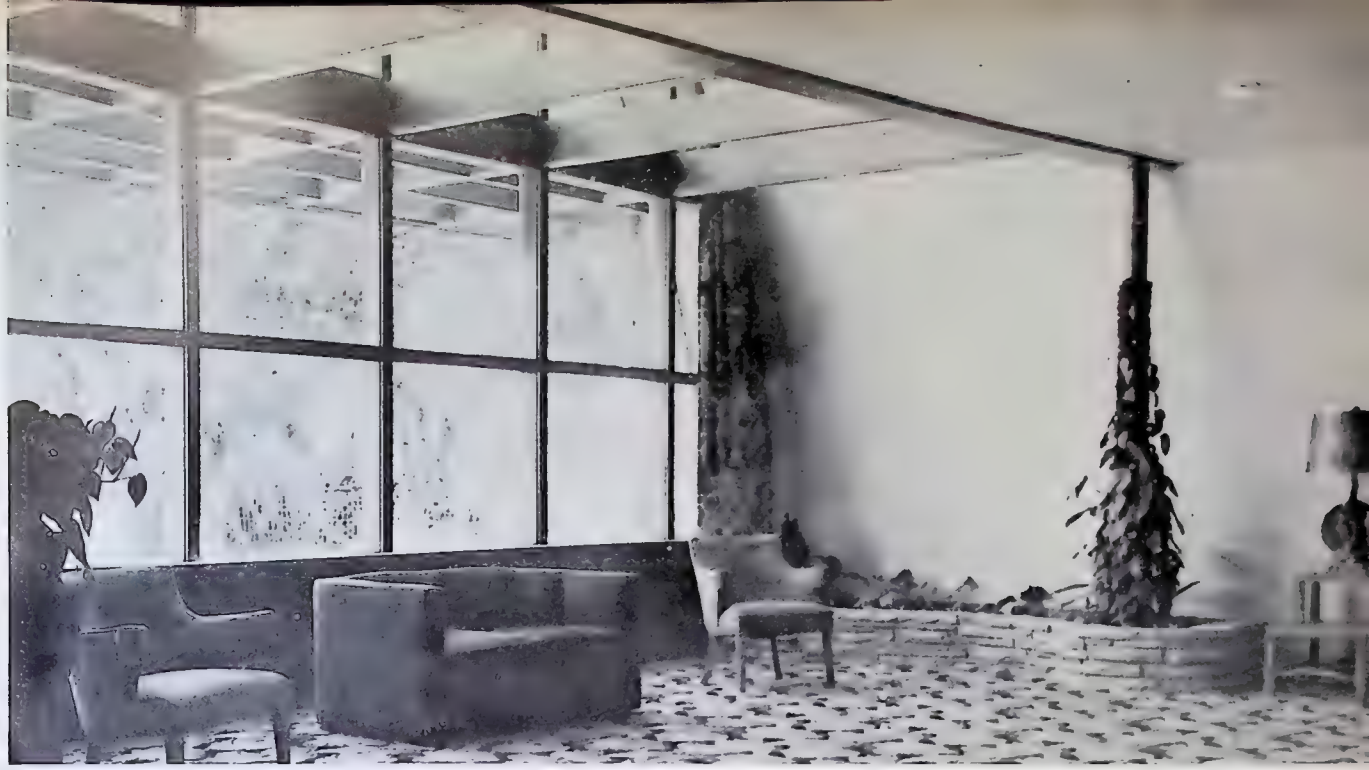
An intelligent use of prefabricated Quonset arch construction can be noted in this new, air-conditioned, rural, first-run theatre that commands a 50-cent adult admission scale.

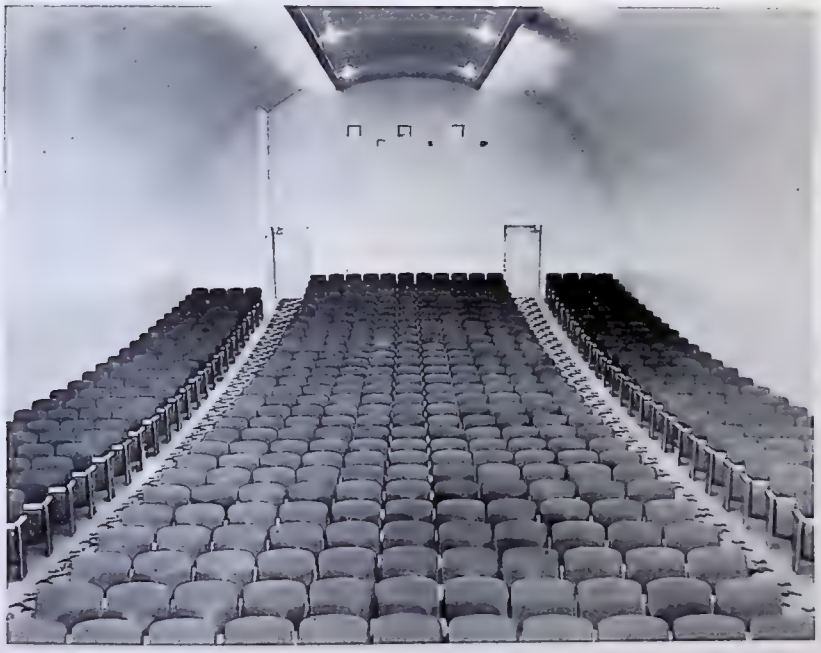
The front effectively combines the use of sand stone, natural stained redwood and vermillion micarta, while the auditorium and roof sections are built of 40-foot Quonset arches covered by a wooden deck. Following what has come to be known as "California" design, the result is modern and efficient.

A shallow entrance vestibule leads through glass doors into a generous interior lobby. Walls of the auditorium are light green hard plaster, and both lighting and air conditioning are distributed through the central ceiling trough. Plant life is used extensively throughout.









REFERENCE DATA

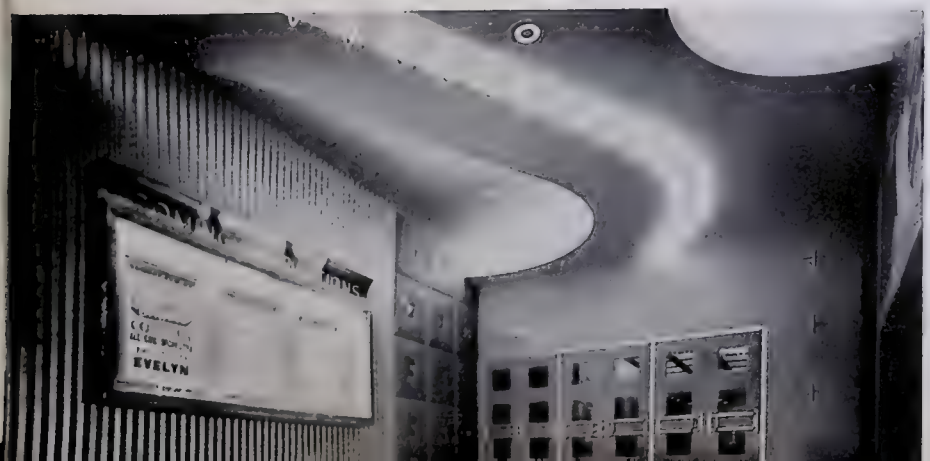
OWNER & OPERATOR: Huish-Gilhool Theatre Enterprises.
ARCHITECT: Fred L. Markham, W. Rowe Smith, Associate.
SEATING CAPACITY: 674.
COST OF BUILDING: $110,000.
COST OF EQUIPMENT (including air conditioning): $30,000.
SIZE OF LOT: 115'-6" x 200'.

Carpets: Alexander Smith & Sons Carpet Co. Crestwood.
Chairs: International Seat Co.
Changeovers: Dowser Mfg. Co.
Curtain Controls & Track: Vallen, Inc.
Decorator: Harry Hawthorne.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: J. E. McAuley Mfg. Co.
Projection Machines: International Projector Corp. Super Simplex.
Rectifiers: McColpin-Christie Corp.
Rubber Mats: U. S. Rubber Co.
Screen: Walker-American Corp.
Sign Letters: Wagner Sign Service, Inc.
Sound: Western Electric.
Supply Dealer: Intermountain Theatre Supply Co.









SHEA'S •

Ashtabula, Ohio

Located in the heart of the business section, every effort was expended to impress its patrons with its modern theatrical facilities.

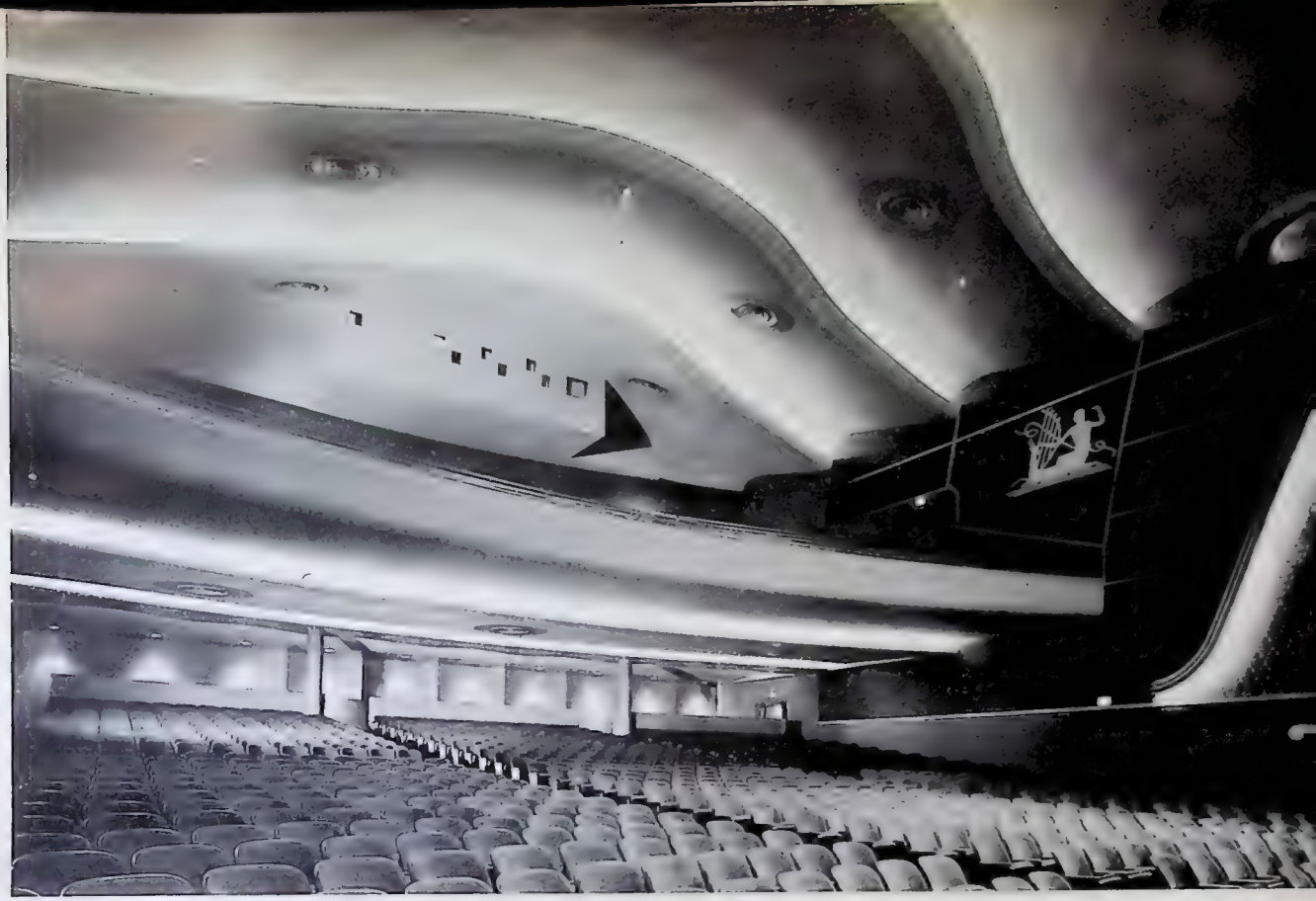
Construction is of steel and masonry with the front resplendent in Indiana limestone and structural glass. Etched, clear glass doors, open to a long lobby, one wall of which displays a large mural while the other mounts an advertising frame. To dwarf the distance, a huge ceiling ornament outlined by cove lighting is featured.

The inner foyer is also a problem in depth. A lighted "crate" ceiling section diverts attention, and the grand foyer with its tremendous cast aluminum staircase and two-story high "crate" ceiling does even more to break the areas into separate interests. Large figured carpeting is in gold, blue, and red.

In the big auditorium, curving lines and architectural planes of the ceiling and side walls provide a fanciful theme that is heightened by the concealed neon strip lighting.

Drummed glass cloth on the walls, blending with the carpet, form the basis of the decorative coloring. The ceiling is of tinted lemon yellow acoustic plaster. Stage draperies are in gold satin, blue and silver damask and silver satin; and the stage is fully rigged for flesh entertainment.

While many problems of construction were inherent to the plot availability, a highly imaginative and workmanlike accomplishment has resulted.



MOULDED PLASTER FRAMING that is indirectly strip lighted, forms two large damask insert wings at the proscenium sides and sets the theme for the free flowing curves of the room.

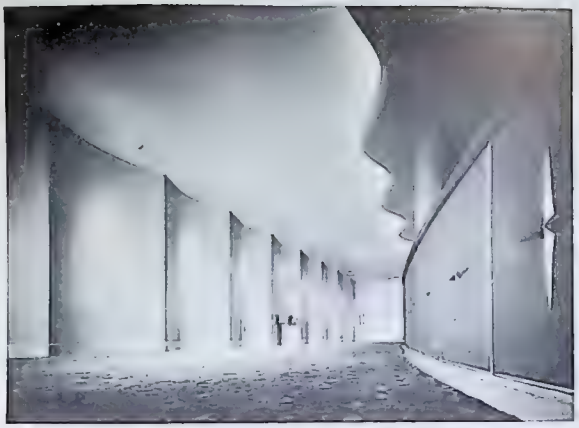
REFERENCE DATA

OWNER & OPERATOR: Shea Theatre Corp.
ARCHITECT: Michael J. DeAngelis.
SEATING CAPACITY: 1,680.
COST OF BUILDING: over $500,000.
COST OF EQUIPMENT (including air conditioning): $110,000.
SIZE OF LOT: 30,000 square feet.

Acoustical Material: U. S. Gypsum.
Air Conditioning: Chrysler Air-Temp.
Carpets: Bigelow-Sanford Carpet Co.
Chairs: American Seating Co. Bodiform.
Coinchanger: Brandt Automatic Cashier Co.
Curtain Controls & Track: Vallen, Inc.
Decorator: Rau Studios.
Display Frames: Universal Corp.
Draperies & Stage Curtains: Capitol Motion Picture Supply Corp.
Generators: RCA Century.
Lenses: Kollmorgen Optical Corp.
Projection Lamps: RCA Brenkert Enarc.
Projection Machines: International Projector Corp. Super Simplex.
Rewinders: Goldberg Bros.
Rubber Mats: U. S. Rubber Co.
Screen: RCA Snowhite.
Sign & Marquee: Empire Neon Lights, Inc.
Sound: Century Projector Corp.
Supply Dealer: Capitol Motion Picture Supply Corp., National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.
Vending Machines: Manley, Inc. Popcorn.

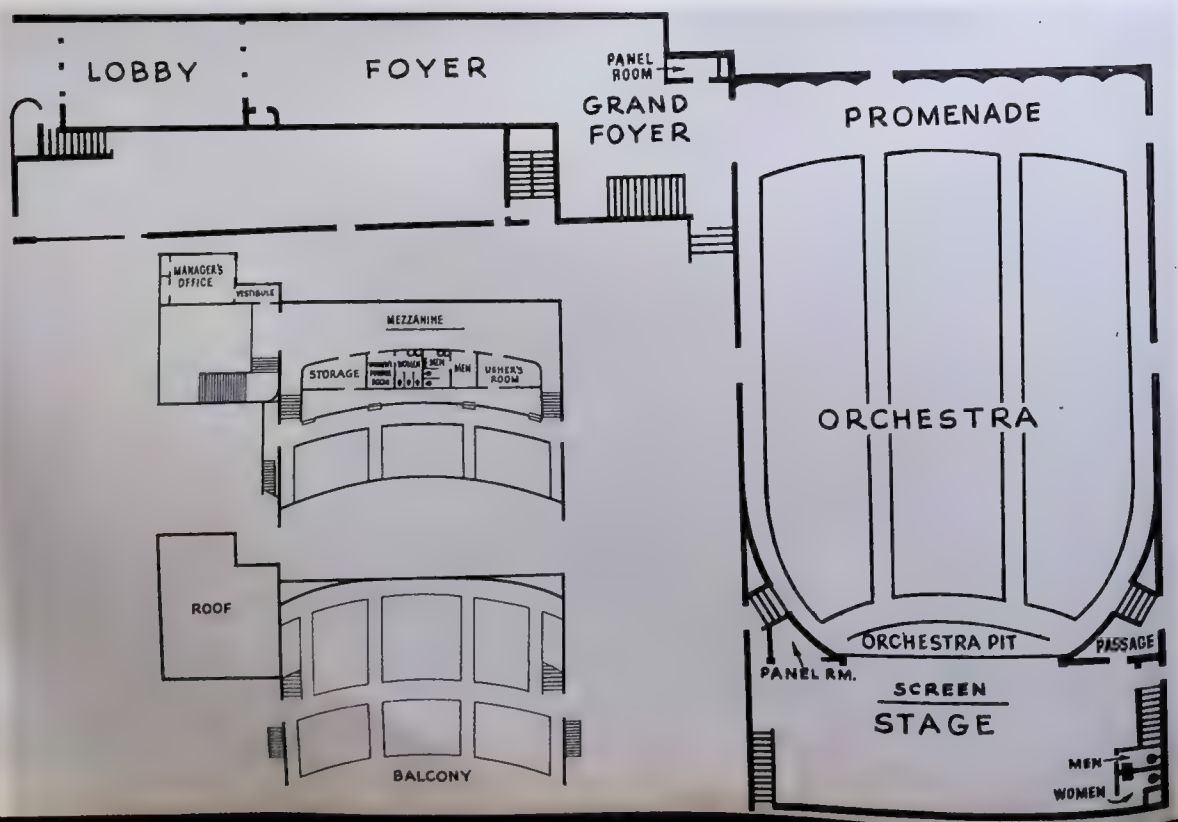








LIGHTING plays an important part throughout the interior of Shea's, Ashtabula, Ohio, and is very professionally handled so the maximum results are obtained. Most of it is indirect but there is also a generous use of ceiling downlights and spotlights, and of area flood lighting.



ODEON •

Ottawa, Ontario

A hearty welcome as the first new theatre of importance to be erected in the Dominion's capital for many years greeted the opening of the Odeon May 21, 1949. Located in a busy downtown shopping district close to a heavily populated residential area, it shows key-runs.

Absolute simplicity keynotes the exterior with a light stone facing and black marble on either side of the glass entrance doors. Modernity is emphasized by five two-story picture windows and a streamlined vertical sign. A black and white marquee and stainless steel display frames are additional attractions.

The spacious blue and gold circular lobby has walls panelled in birch, a geometric design inlaid in the terrazzo floor, and rubber directional matting. The suspended ceiling has an inverted dome.

A section of the mezzanine foyer is devoted to an art gallery with pictures by prominent Canadian artists hung on the neutral red walls. Here also is found a luxurious tea lounge with complete snack and service bar facilities. A check and powder room adjoin the lounge.

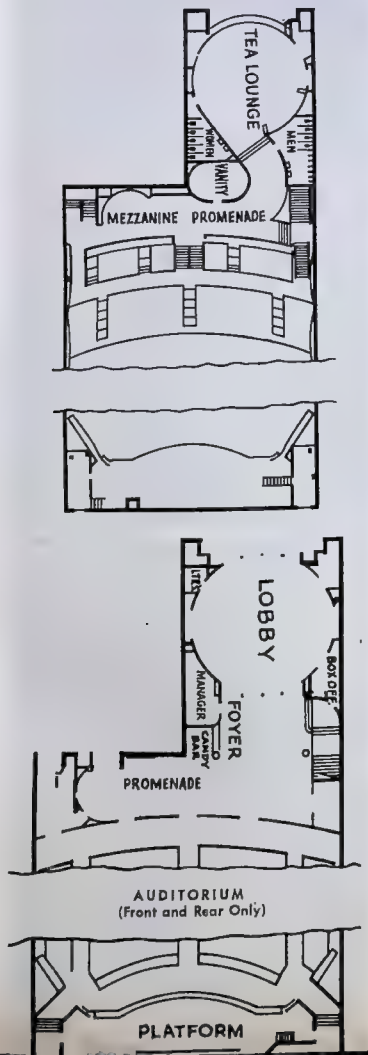


REFERENCE DATA

OWNER & OPERATOR: Odeon Theatres (Canada), Ltd.
ARCHITECT: Jay I. English (deceased), J. Leslie Kemp.
SEATING CAPACITY: 1,539.

Air Conditioning: U. S. Air Conditioning Co.
Carpets: Toronto Carpet Co.
Chairs: Kroehler Mfg. Co. (Mezzanine).
Decorator: B. T. Green.
Generators: Automatic Devices Co. Stabilarc.
Projection Lamps: Gaumont Kalee "21".
Projection Machines: Gaumont Kalee "21".
Rewinders: Wenzel Projector Co.
Sign Letterss Adler Silhouette Letter Co. 10" 12", 16", 24".
Stereopticons: GoldE Mfg. Co.
Supply Dealer: Gaumont Kalee, Ltd.

THE FRONTAGE, necessarily narrow, broadens into the spaciousness of the lobby and outer foyer.









EXCELLENT ACOUSTICS are achieved by a series of suspended ceilings and coves in the sidewalls at 15-foot intervals. The brocade drapes in the tea lounge have a black and white keystone pattern against a green background. A patterned wall behind points up the foyer candy stand.





SMOKING LOGES are situated in the fore of the balcony. Arrangement of drapes replaces the usual proscenium arch. Note concealed cove lighting in ceiling. Double-sided dressing tables are provided in the powder room with cold cathode lighting. An air of luxury pervades the foyer.









BELMONT •

Youngstown, Ohio

A large plot of ground, strategically located at the intersection of three highways, was shrewdly chosen as a site for the Belmont. Opened December 3, 1948, it shows subsequent-run films to a middle-class populace of over 25,000.

In addition to parking facilities for 500 cars, special features of the theatre include: three heating systems for the auditorium, lobby, and sidewalk respectively; a multi-station public address system; continuous music during show times in the lobby, rest rooms, and outside near the boxoffice area, and a beautiful modernistic pool and fountain with illuminated lighting effects at night in front of the building.

The tapestry brick exterior has a structural glass entrance with Herculite glass doors. The pink pastel ceiling of the outer lobby incorporates cold cathode lights. One curved wall is decorated with an arrangement of foliage and flowers applied to a black background.

The serpentine walls of the foyer are covered with light walnut Flexwood. Four large display frames are of oak. The ceiling is indirectly lighted and has a dome of abstract design. A refreshment counter is located at the far end.

The auditorium has standing wall panels with indirectly lighted coves finished in pink. The walls are of gold damask applied to plaster. Ceiling coves are lighted with pink and blue cold cathode to produce a colorful glow.

REFERENCE DATA

OWNER & OPERATOR: Wellman Theatres, Inc.
ARCHITECT: Michael J. DeAngelis.
SEATING CAPACITY: 1,500.
COST OF BUILDING: $350,000.
COST OF EQUIPMENT (including air conditioning); $115,000.
SIZE OF LOT: 5 Acres.

Acoustical Material: Sabonite.
Carpets: A. & M. Karagheusian, Inc.
Chairs: American Seating Co. Bodiform.
Coinchanger: Johnson Fare Box Co.
Decorator: Novelty Scenic Studios, Inc.
Draperies & Stage Curtains: Novelty Scenic Studios, Inc.
Generators: RCA Century 70-140 amp.
Lenses: Kollmorgen Optical Corp. Super Snaplite.
Projection Lamps: RCA Brenkert Enarc.
Projection Machines: RCA Brenkert. BX-80.
Rubber Mats: U. S. Rubber Co.
Screen: RCA Snowhite.
Sign & Marquee: Bellows Sign Co. 12", 24".
Sign Letters: Wagner Sign Service, Inc.
Sound: RCA PG-240.
Supply Dealer: Oliver Theatre Supply Co., Inc.
Ticket Issuing Machine: General Register Corp. Automaticket.
Ticket Chopper: GoldE Mfg. Co.

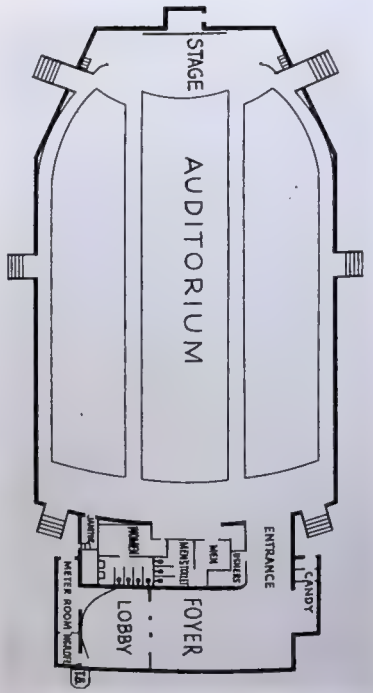


FOYER WALLS have display frames, mirrors, and plywood panels. Top of candy counter is Formica, the front padded leatherette.

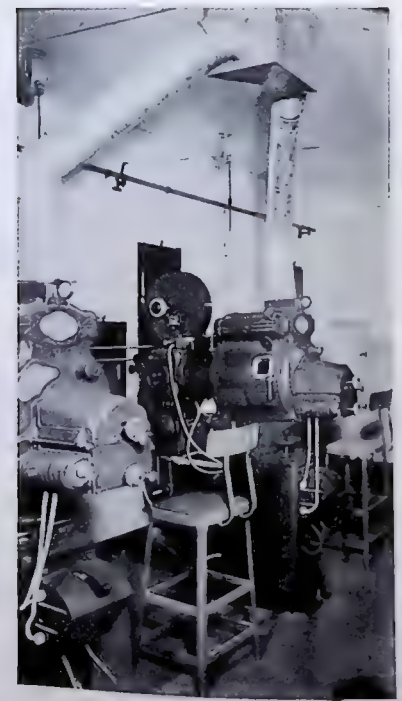


PLASTER CAST MODELS frame the stage in keeping with the modern baroque style of the auditorium. The ceiling is of acoustic plaster, and side wall fabrics are padded with fibreglass padding. Anemostats provide cooling, and indirect downlights furnish soft illumination. The "cry room" on the second floor accommodates about 30 patrons. An observation window and sound permit continued viewing of the show.





THE STANDEE AREA has a rest alcove with a stair leading to the "cry room" above. Padded leatherette covers the rear wall of the alcove, in which functional furniture has been placed. Damask gold and ornamental plaster with pieces of baroque design embellish the upper standee wall. The women's powder room has sections of mirrors with carrara glass shelves and individual stools. A figured fabric decorates the wall areas.







BALDWIN •

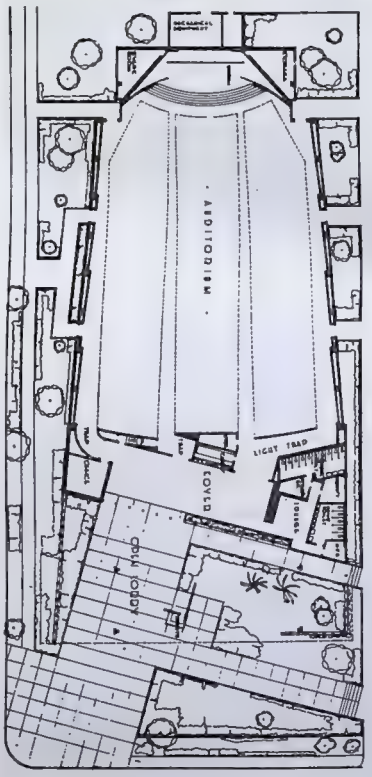
Los Angeles, Calif.

Functional architecture keynotes the Baldwin, built at a cost of $150 a seat in an area where $250 is deemed normal. Opened August 10, 1949, it serves an upper middle-class patronage with subsequent run and studio preview pictures.

The building has been made high and narrow at the screen, low and wide at the entrance, through the use of nine graduated arches. This innovation saves altitude and floor space, enables the introduction and exhaust of air conditioning without drafts, improves acoustics, and allows the concealment of multi-hued indirect lighting between each circle in the auditorium.

The all-steel and wood frame is covered by acoustic long fibre asbestos material on metal laths. A South Sea motif decorates the open front, and braces for the two frontal arches become signs.

Foliage is planted around the lattice work in the lobby and in the 117-foot foyer, which is faced with plate glass. Redwood on the foyer's back wall and Formica doors adds simple elegance.



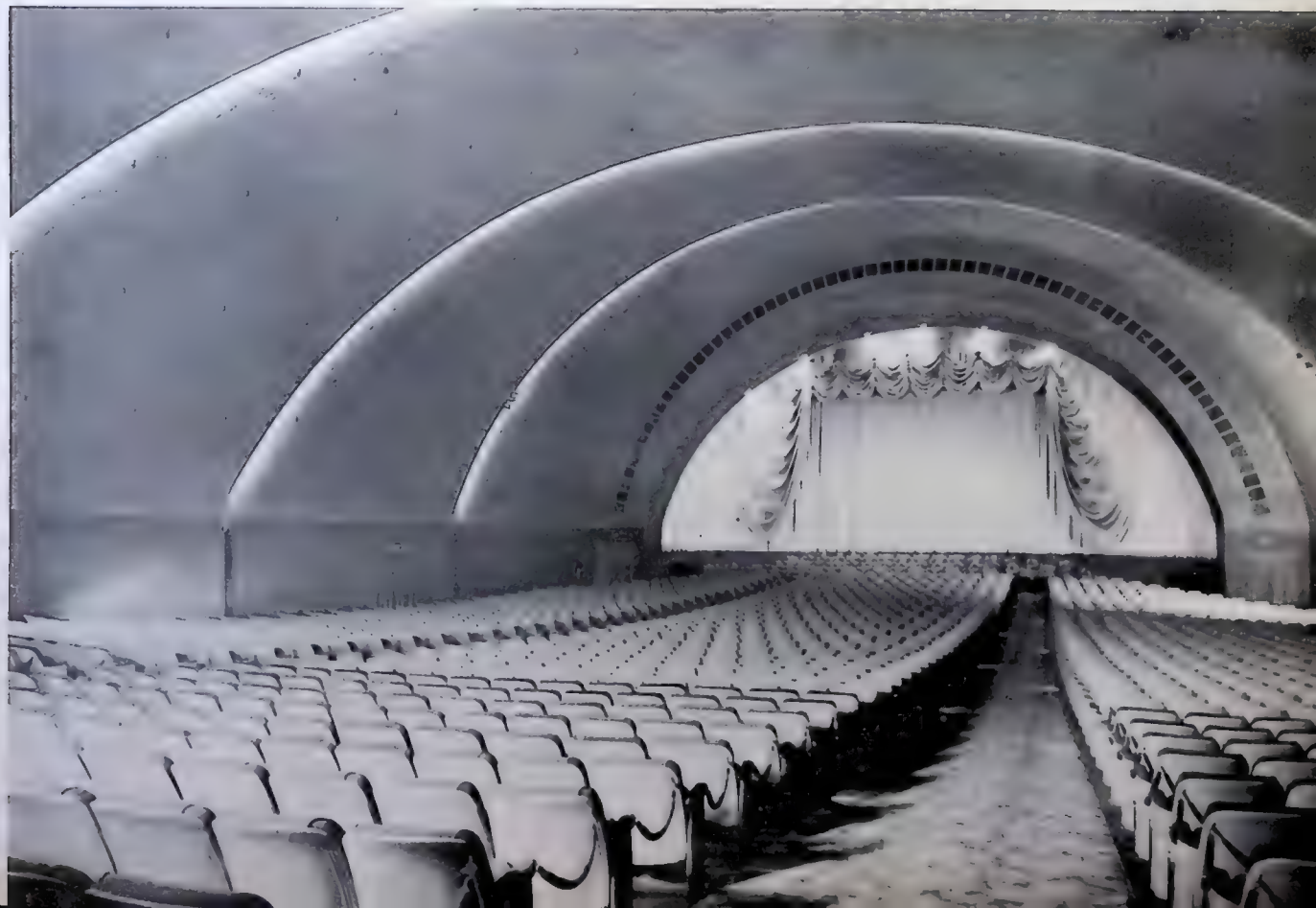
REFERENCE DATA

OWNER: The Baldwin Co.
OPERATOR: Franchon & Marco.
ARCHITECT: Lewis Eugene Wilson.
SEATING CAPACITY: 1,800.
COST OF BUILDING: approx. $264,000.
COST OF EQUIPMENT: $85,000.

Acoustical Material: Limpet.
Carpets: Alexander Smith & Sons Carpet Co.
Chairs: American Seating Co.
Changeovers: Weaver Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Curtain Controls & Track: R. L. Grosch & Sons Scenic Studios.
Decorator: Lewis Eugene Wilson.
Display Frames: Theatre Specialties, Inc. Aluminex.
Draperies & Stage Curtains: R. L. Grosch & Sons Scenic Studios.
Generators: Hertner Electric Co. Transverter.
Lenses: Bausch & Lomb Optical Co. Super Cinephor.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Hycandescent.
Projection Machines: International Projector Corp. Simplex E-7.
Rewinders: GoldE Mfg. Co.
Rubber Mats: Goodyear Rubber Co.
Screen: Walker-American Corp. Plastic.
Sign Letters: Theatre Specialties, Inc. Bevelite 10", 17".
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.











RYAN •

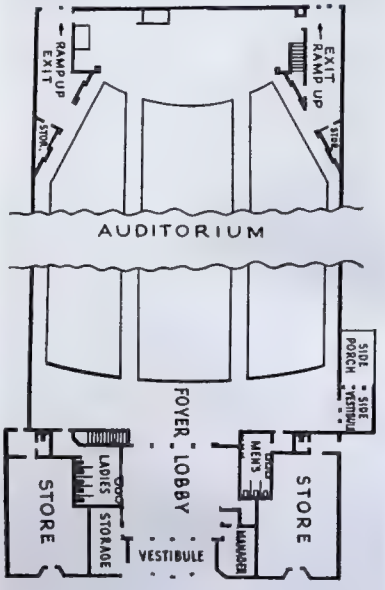
Van Dyke, Mich.

Key-run pictures figure prominently in the operating policy of the Ryan, which was opened December 28, 1949, to serve the entertainment needs of a drawing populace of some 20,000.

The principal special feature is a side exit vestibule opening on the 500-car parking lot with a canopy so that patrons may wait under shelter.

The fireproof brick building has a mottled cream, tan, and red porcelain enamel front. The double marquee is studded with bright stars in the center.

Flowers are painted on the green background of the lobby walls, and the floor is of red, green, and tan rubber tile. Both the auditorium and foyer have colorful decorations on cinder block. Toilet rooms have cream tile walls and terrazzo floors.



REFERENCE DATA

OWNER & OPERATOR: Motor City Theatres, Inc.
ARCHITECT: Talmage C. Hughes.
GENERAL CONTRACTOR: Johnson Construction Co.
SEATING CAPACITY: 1,400.
COST OF BUILDING (including air conditioning): $205,000.
COST OF EQUIPMENT: $55,000.
SIZE OF LOT: 200′ x 650′.

Acoustical Material: Cinder Block.
Carpets: Alexander Smith Sons Carpet Co. Crestwood.
Chairs: American Seating Co. Bodiform.
Changeovers: Weaver Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Curtain Controls & Track: Vallen, Inc.
Decorator: T. Jagmin, Inc.
Display Frames: Theatre Specialties, Inc. Aluminex.
Draperies & Stage Curtains: Mork-Green.
Generators: Hertner Electric Co.
Lenses: Kollmorgen Optical Corp. Super-Snaplite F 2.0.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Super Simplex.
Rewinders: Goldberg Bros.
Rubber Mats: U. S. Rubber Co.
Screen: Walker-American Corp.
Sign & Marquee: Long Sign Co.
Sign Letters: Wagner Sign Service, Inc. 10″ Plastic.
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.







TROUGH LIGHTING runs across ceiling and above standee rail. Note "cry room" sign at right. Large poster case dominates one wall of lobby.



FLOWER •

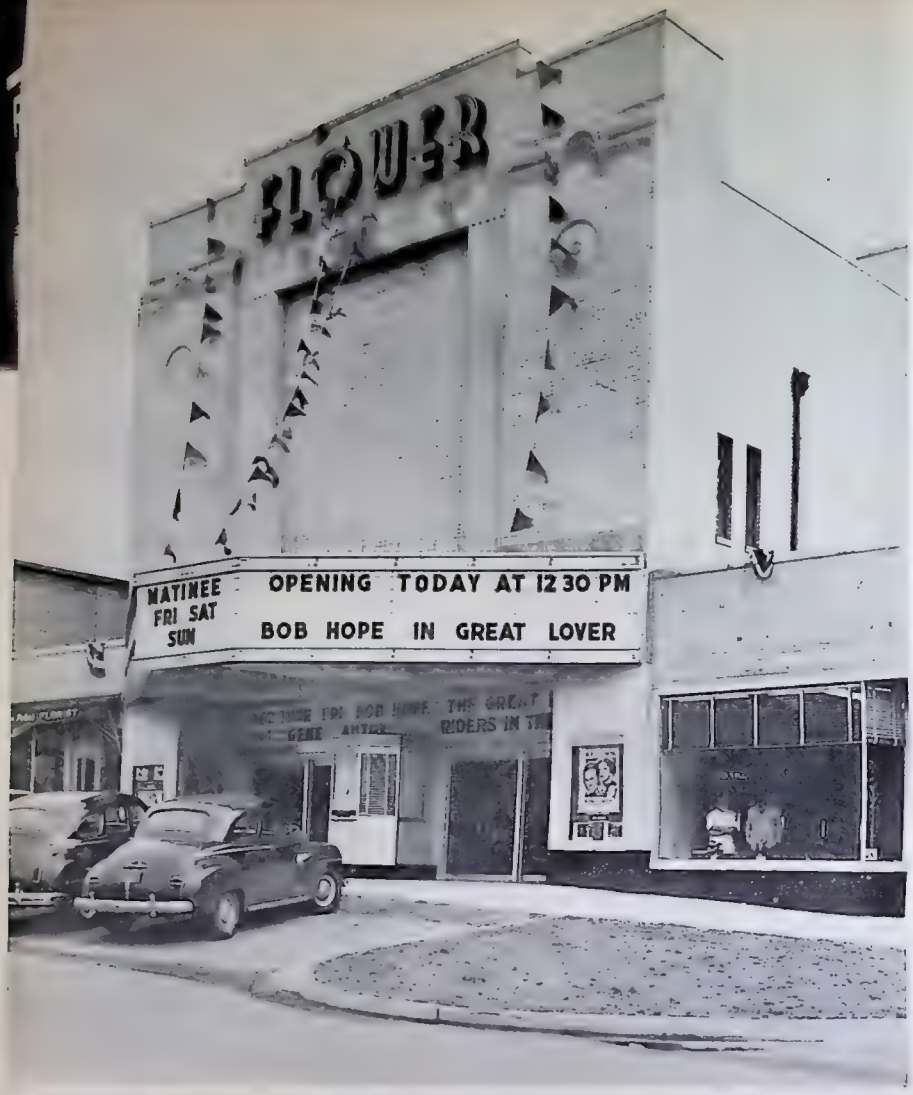
Takoma Park, Md.

The Flower was conceived and designed as an integral part of a modernistic shopping center in a fashionable suburb of Washington, D. C. Opened February 15, 1950, it is the amusement focal point of a commercial area which includes a food market, a drug store, eight other types of shops, and parking accommodations for 600 cars.

An impressive facade of light brick, limestone, and marble dominates the theatre front with display cases mounted on either side. An enclosed boxoffice is centered between two pairs of glass entrance doors.

Composition walnut paneling covers the walls of the lobby, which have been adorned with mirrors and poster cases. Terrazzo strips make up the floor, and indirect lighting is set in a plaster ceiling.

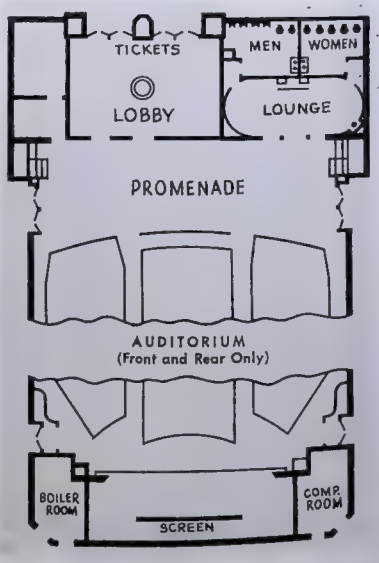
Solid pale Dubonnet carpeting has been used in the foyer and throughout the rest of the house, including the second floor. Here, in deference to the theatre's growing popularity as a community meeting place as well as a motion picture showcase, is a room for private parties as well as a nursery for children.

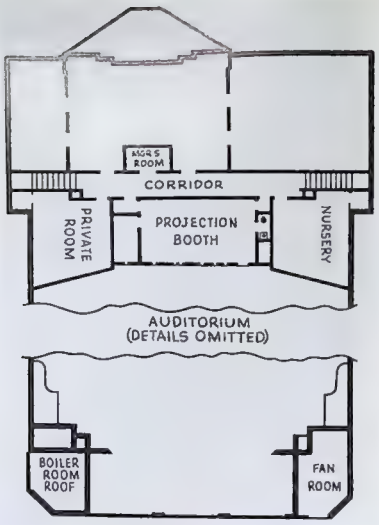






REFINED SIMPLICITY keynotes the plain front, modest lobby, and the furnishings of the lounges.









FOREST GREEN FABRICS cover the walls of the spacious auditorium. The large flowered murals on the side walls express the name of the house in rose, yellow, and high primary colors. The ceiling expanse, dotted with downlights and anemostats, is mocca, while stage curtains are cerise plush.

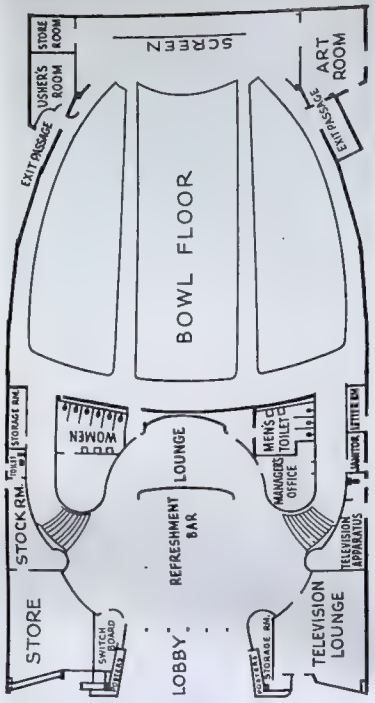
REFERENCE DATA

OWNER: Flower Theatre Development Corp.
OPERATOR: K-B Theatres.
ARCHITECT: John J. Zink and Frederick L. W. Moehle.
SEATING CAPACITY: 949.
COST OF BUILDING (including air conditioning): $225,000.
COST OF EQUIPMENT: $75,000.

Air Conditioning: York.
Carpets: Mohawk Carpet Co.
Chairs: Kroehler Mfg. Co.
Changeovers: RCA Brenkert.
Coinchanger: Johnson Fare Box Co.
Curtain Controls & Track: Vallen, Inc.
Decorator: Paramount Decorating Co.
Display Frames: Universal Corp.
Generators: RCA Century.
Lenses: Kollmorgen Optical Corp. F 1.9.
Projection Lamps: RCA Brenkert Enarc.
Projection Machines: RCA Brenkert.
Rewinders: GoldE Mfg. Co.
Screen: RCA Snowhite.
Sign & Marquee: Regal Neon Sign Co.
Sign Letters: Wagner Sign Service, Inc.
Sound: RCA.
Supply Dealer: Elmer H. Brient & Sons.
Ticket Issuing Machine: General Register Corp.
Ticket Chopper: GoldE Mfg. Co.







PASSERSBY coming from any direction are attracted by the sign tower and the marquee.

CORONET •

San Francisco, Calif.

Heralded at its gala opening November 2, 1949, as the city's first major theatre construction in more than 15 years, the luxurious Coronet serves a middle-class residential populace in a neighborhood shopping district. Top productions on single feature billings follow downtown runs.

In addition to an eye-catching neon vertical sign rising from a three-sided marquee, the front features a plain block design in light Nile green with terrazzo marble running from the curb to the doorway. Marble, together with stainless steel, has also been generously used to trim the glass boxoffice and display cases.

The foyer is a blend of browns, creams, and gold with pre-colored acoustical plaster. A sunken lounge section behind the candy counter has entrances for the manager's office, telephone booth, and rest rooms. The entrance to the special television lounge is at the right. Wall-to-wall carpeting with floral designs in Venetian red retains the plush atmosphere.

The oval chartreuse ceiling of the auditorium has colored lights which follow the perimeter of the oval. Murals on the magenta walls are medieval in design.

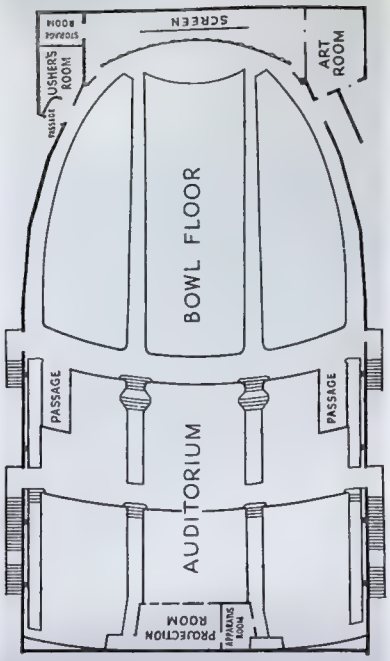
Upper level seats have been arranged in a "stadium," rather than a conventional balcony pattern.

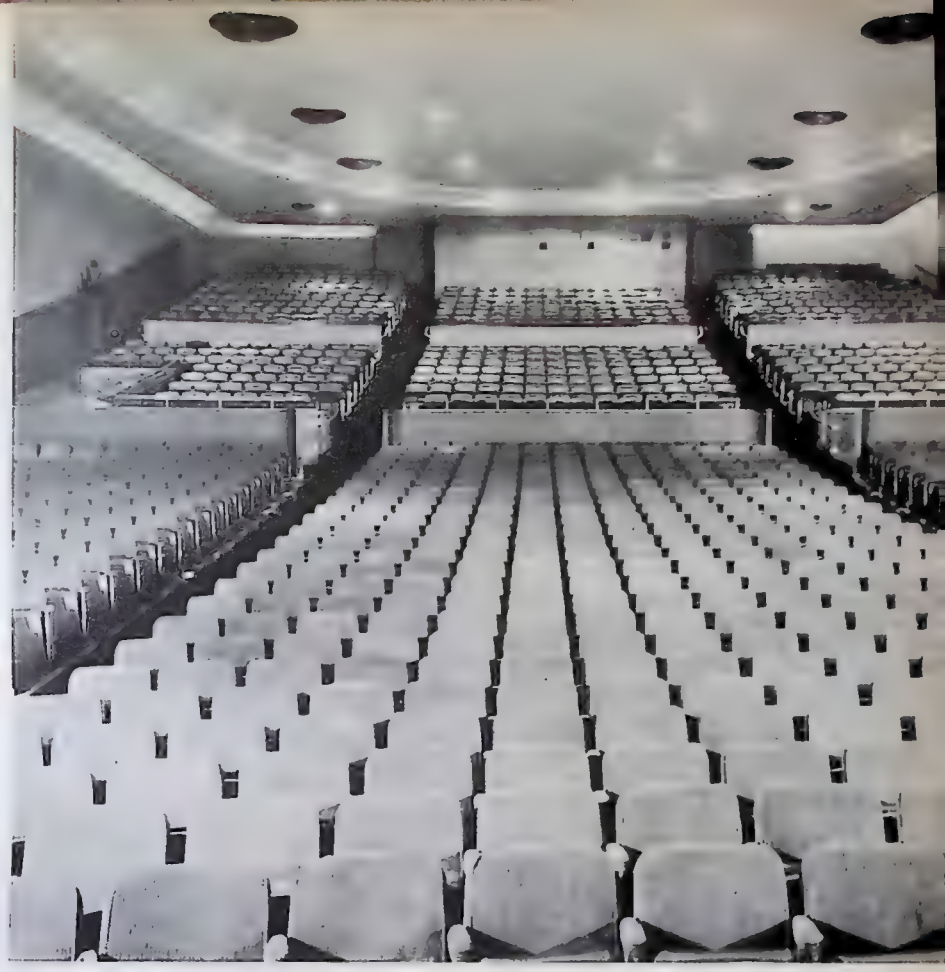
MAROON ORIENTAL MARBLE and stainless steel trim enhance the appearance of the glass display cases and "island" boxoffice.



THE SUNKEN LOUNGE behind the candy counter provides waiting room for patrons with comfortable settees and reading lamps. The walls are panelled with gray Flexwood.







LOGE-TYPE seats in foreground are Venetian red, while rocking chair loges above are in green.

REFERENCE DATA

OWNER & OPERATOR: San Francisco Theatres, Inc.
ARCHITECT: Cantin & Cantin.
SEATING CAPACITY: 1,336.
SIZE OF LOT: 90'-6" x 175'.

Acoustical Material: Plaster.
Chairs: American Seating Co., Heywood-Wakefield Co.
Changeovers: Weaver Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Decorator: Tony Heinsbergen.
Draperies & Stage Curtains: R. L. Grosch & Sons Scenic Studios.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: J. E. McAuley Mfg. Co.
Projection Machines: International Projector Corp. Simplex.
Screen: Walker-American Corp. Plastic.
Sign Letters: Adler Silhouette Letter Co. 10", 17" Plastic.
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp.

NEON TUBING in ceiling coves and inset lights illuminate the foyer. The left entrance to the auditorium is up the small flight of stairs visible in background.



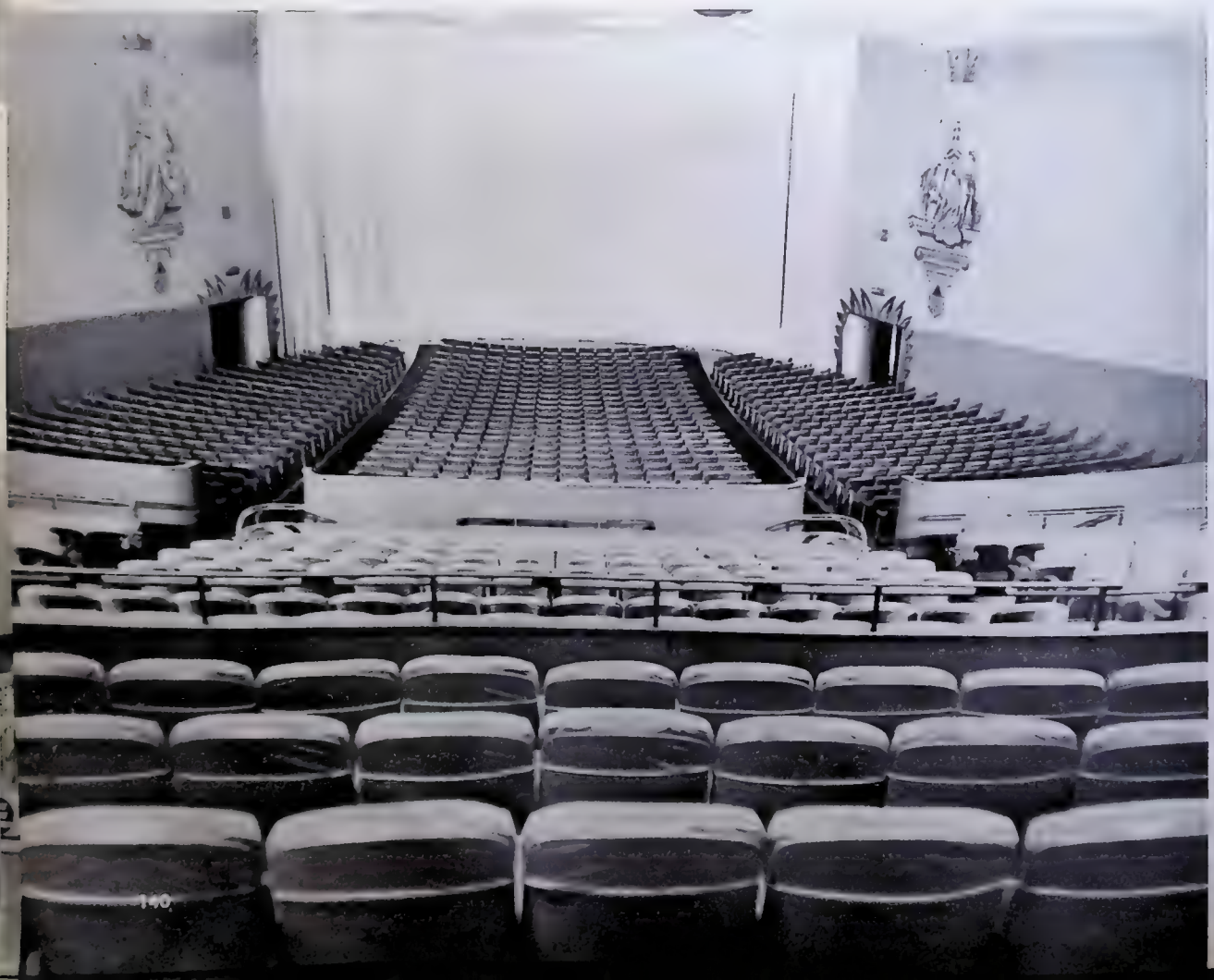
A POTTED PLANT, sand urns, rich carpeting, and a large display case add decorative touches to the luxurious foyer area.







THE TELEVISION LOUNGE holds approximately 100 people and has a five by seven-foot screen with a gold satin curtain. Gay floral wall patterns and massive mirrors enliven the powder room. Marble floors are beautiful and serviceable. Rocking chair loges have plastic slip covers.





MEADOWS •

Fresh Meadows, Queens, N. Y.

An enclosed theatre strategically located on a site which might easily be the envy of many a drive-in owner because of its proximity to several express highways, the Meadows was designed with the automobile trade distinctly in mind. Since only limited public transportation is available outside of privately owned automobiles, the adjoining 1,000-car parking lot was an imperative necessity.

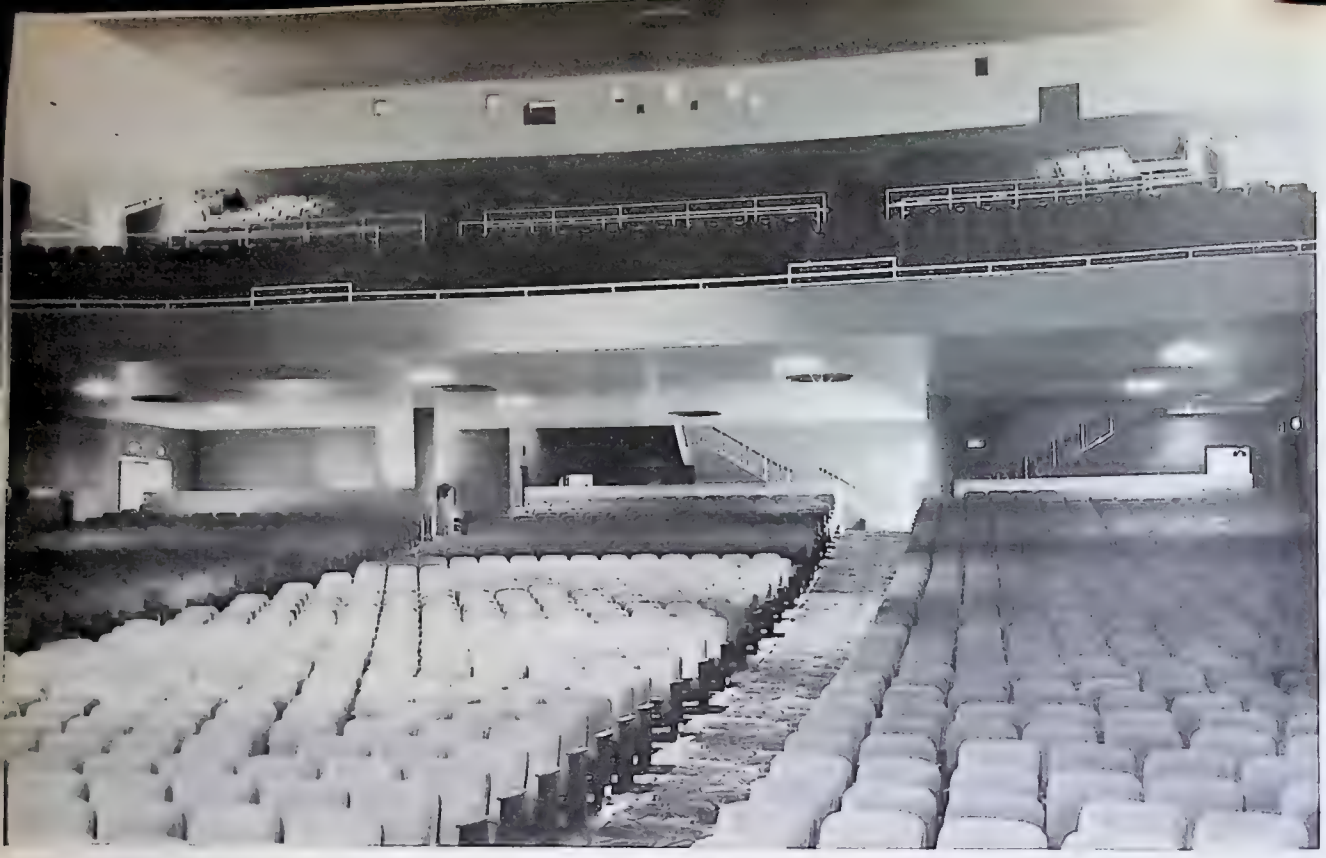
The drawing populace is by no means restricted to the 3,000-family housing project in which the house is situated. Heavy patronage is attracted from densely populated neighboring communities, almost all of which have parking problems which Meadows' customers do not find. Key-run pictures have been shown since the house's opening November 23, 1949.



An ultra-modern theme prevails throughout the construction and furnishings of the house from the brick and limestone front with its porcelain enamel marquee through the terrazzo and marble lobby, one wall of which is solid glass, into the sweeping lines of the auditorium. Special features include a refreshment bar in a separate room off the main floor and a parcel check room.

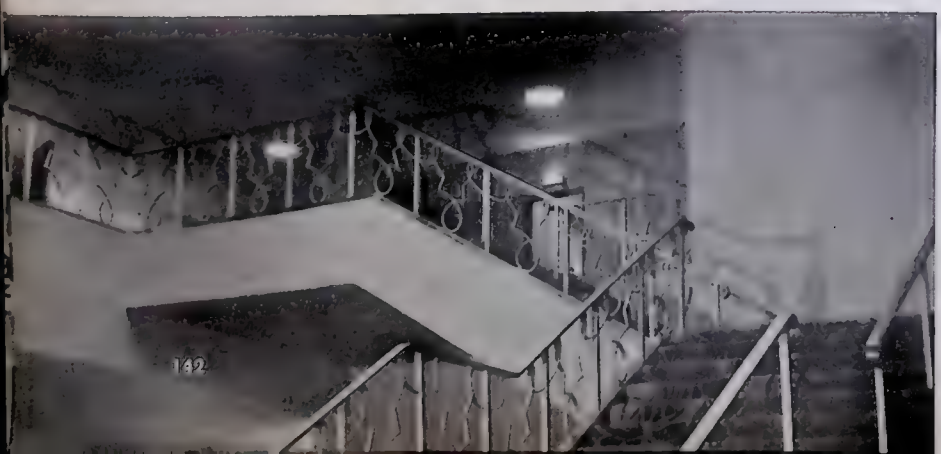


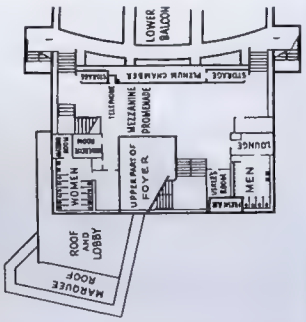


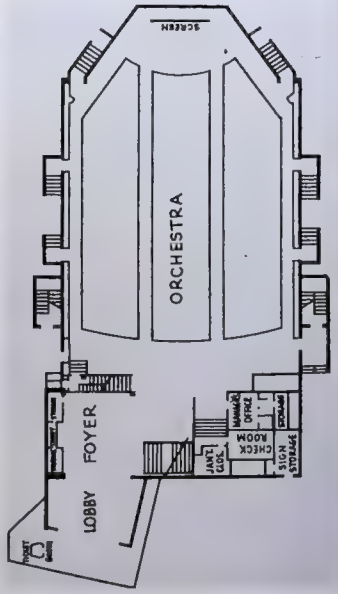


PERFECT SIGHT LINES are assured from every main floor, loge, and balcony chair by staggered seating. The transite walls are moss green with cast plaster medallions on the splays, while the curved ceiling is gray. An artistically wrought staircase guides patrons to the lavish mezzanine lounge above.







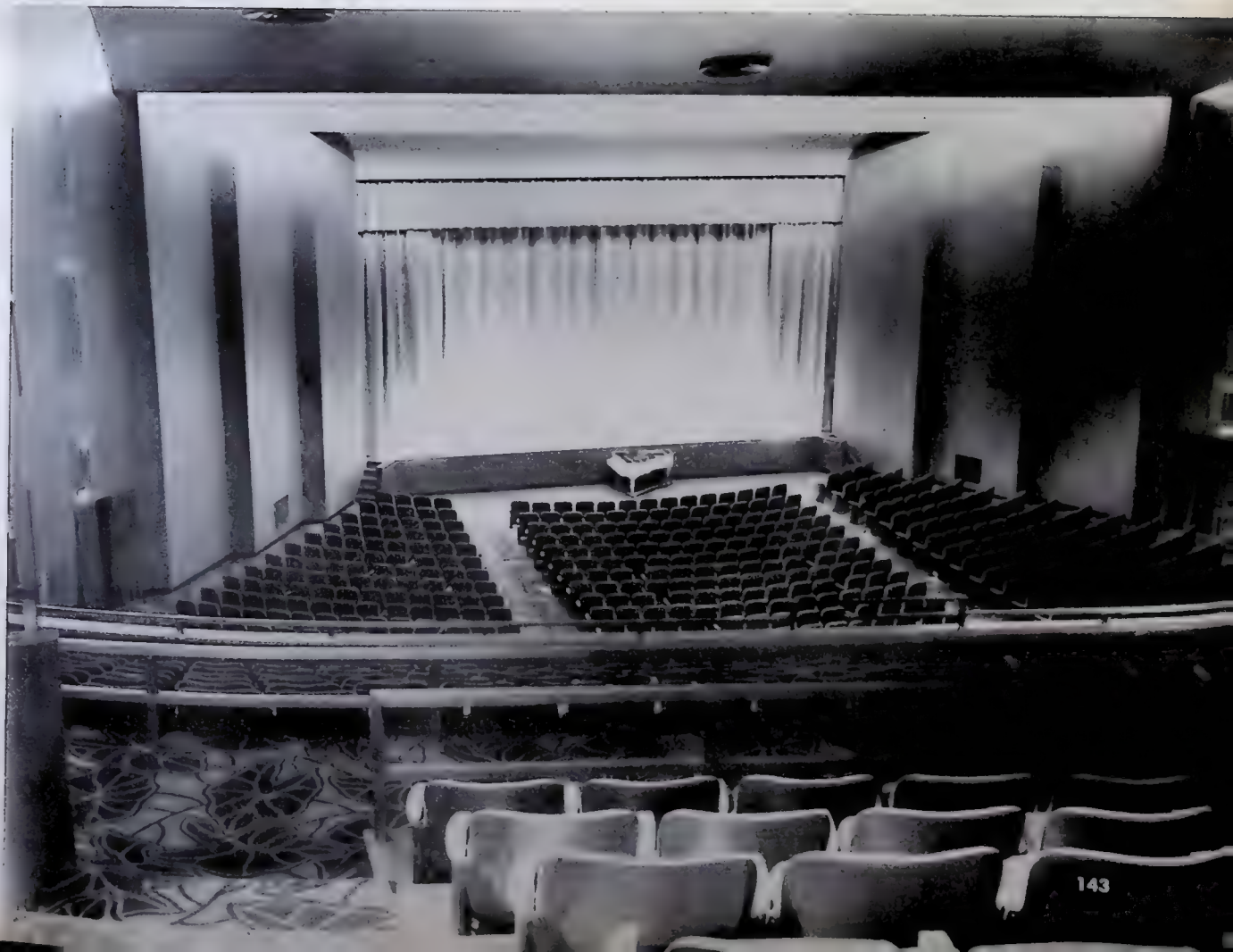


REFERENCE DATA

OWNER: N. Y. Life Insurance Co.
OPERATOR: Century Theatres, Inc.
ARCHITECT: Voorhies, Walker, Foley & Smith.
SEATING CAPACITY: 2,184.

Carpets: A. & M. Karagheusian, Inc.
Chairs: Kroehler Mfg. Co. (orchestra), Heywood-Wakefield Co. (loge), American Seating Co. (balcony).
Coinchanger: Brandt Automatic Cashier.
Curtain Controls & Track: Automatic Devices Co.
Draperies & Stage Curtains: Regal Drapery Studios.
Generators: Hertner Electric Co.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Rewinders: International Projector Corp. Simplex.
Sign & Marquee: Century Neon Sign Co.
Sign Letters: Adler Silhouette Letter Co. 10", 17" Red & Blue Plastic.
Sound: RCA PG-244.
Ticket Issuing Machine: General Register Corp. Automaticket.
Ticket Chopper: General Register Corp.







LAKE •

Euclid, Ohio

Hospitality, which begins at a boxoffice with an inside as well as an outside window so that patrons are not forced to stand outdoors in bad weather, keynotes the Lake. Built in a growing residential section of Cleveland, and opened September 1, 1949, it serves an upper and middle-class drawing populace of approximately 32,000 with second-run pictures.

Carrara glass and enamel in designs of ebony and chartreuse have been used in a facade marked by a neon sign tower and a marquee with cold cathode lighting.

Glass doors open into a rotund outer lobby, where the traditional "welcome mat" has been laid out in the form of upholstered settees placed under large mirrors hanging on either side wall. Long boxes of plastic foliage have been placed at the bases of the mirrors. In a novel departure from the usual, only three small lobby display frames appear.

The inner foyer is dominated by a large white serpentine lounge and a 28-foot candy counter, connected with a sealed 15-foot square popcorn room. Carpeting here, as elsewhere, is subdued with the color drama in the walls and lighting.

Turquoise and coral, blended with other pastel shades, are the predominating colors in the auditorium. The walls portray undersea motifs, featuring hand-painted murals in sea green, blue, rose, yellow, and silver. Cove lighting accentuates the color effects.

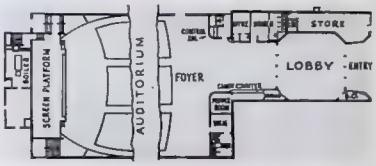


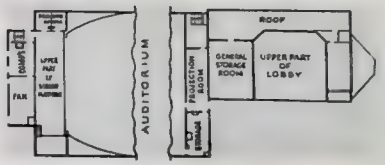


REFERENCE DATA

OWNER & OPERATOR: Associated Theatres Circuit.
ARCHITECT: Matzinger & Grosel.
SEATING CAPACITY: 1,600.
COST OF BUILDING: $425,000.
COST OF EQUIPMENT: $55,000.

Air Conditioning: Westinghouse Electric Co.
Carpets: Alexander Smith & Sons Carpet Co.
Chairs: American Seating Co. Bodiform.
Changeovers: Weaver Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Decorator: Hans Teichert.
Display Frames: Theatre Specialties, Inc. Aluminex.
Draperies & Stage Curtains: Premier Studios.
Generators: Hertner Electric Co.
Lenses: Bausch & Lomb Optical Co. Super Cinephor.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Rubber Mats: Lorraine Rubber Eng. Mfg. Co.
Screen: Walker-American Corp.
Sign Letters: Theatre Specialties, Inc. 10", 17" Plastic.
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp. Automaticket.
Ticket Chopper: GoldE Mfg. Co.









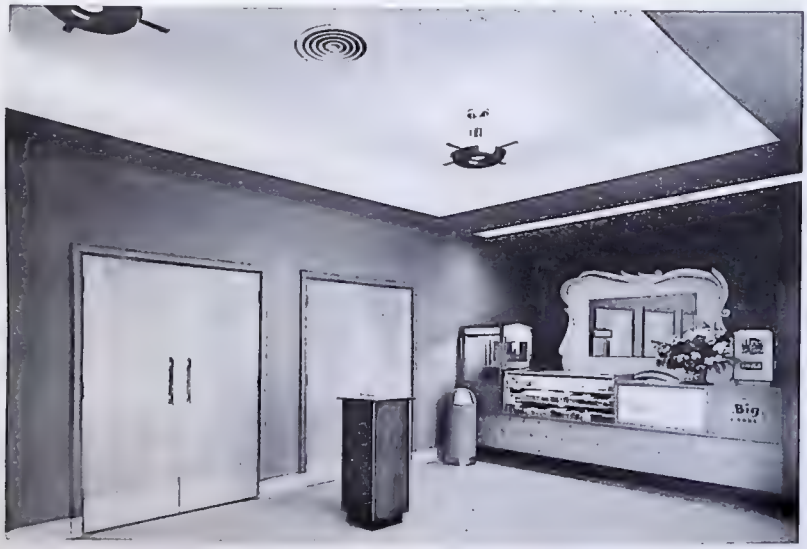
COLONY •

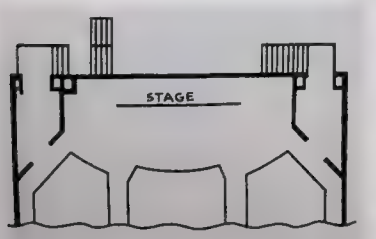
Baltimore, Md.

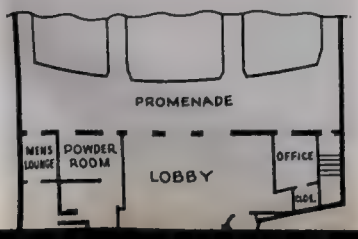
Inasmuch as cost was a prime consideration, the Colony embodies a number of noteworthy money-saving features, such as the incorporation of boiler and air-conditioning space under the stage and exits, the absence of parapet walls except at the front, and the minimizing of attic space by sloping the main girders to allow for main heating and cooling duct at one side and one run of gutters.

The front of the theatre, which was opened October 13, 1949, in a neighborhood shopping district, features light-colored brick with block brick inserts and trim. Double display cases are set below two large glass block panels. Serpentine stone panels with aluminum strips adorn the facade.

A simple treatment, found throughout the entire house, has been given the shallow terrazzo-floored lobby to emphasize the streamlined confection stand.













A SPACIOUS PARKING LOT at the rear is well-paved and will be attractively planted. Coral wall fabrics cover the walls of the auditorium. The cement plaster below is painted blue green. The flat ceiling slopes toward the front, which has been treated with curtains to give it greater width.

REFERENCE DATA

OPERATOR: Community Co.
ARCHITECT: John J. Zink & Frederick L. W. Moehle.
SEATING CAPACITY: 800.
SIZE OF LOT: 135' x 500'.

Carpets: Alexander Smith & Sons.
Chairs: Heywood-Wakefield Co.
Changeovers: Weaver Mfg. Co.
Curtain Controls & Track: Vallen, Inc.
Decorator: Paramount Decorating Co.
Display Frames: Theatre Specialties.
Generators: Hertner Electric Co.
Lenses: Kollmorgen Optical Corp. Super.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machine: International Projector Corp. Simplex.
Rewinders: Goldberg Bros.
Screen: Walker-American Corp.
Sign & Marquee: Belsinger Signs.
Sign Letters: Wagner Sign Service, Inc.
Sound: International Projector Corp.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp.





TRYON •

Amsterdam, N. Y.

Skilled workers in the town's two large carpet mills constitute the bulk of the Tryon's patronage. Opened in April, 1949, it is located in a main business section.

Indiana limestone and face brick have been neatly blended to form a modern front, distinguished by a triangular flag tower. The circular bronze marquee and arcade ceiling are of non-glaring illuminated egg crate. Display frames are recessed in Verde antique green marble.

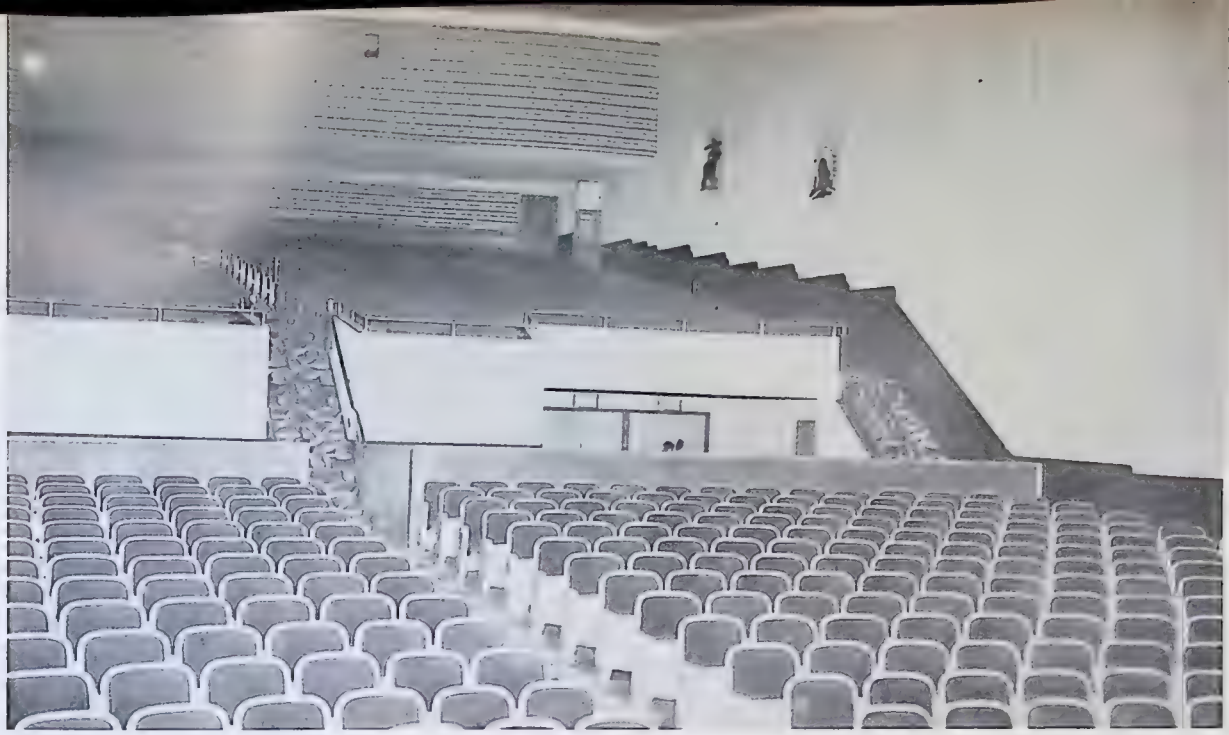
A yellow verona and rubber tile floor, Craig pink walls, and recessed pin lights are found in the lobby. The lighted confection stand is of pickled oak.

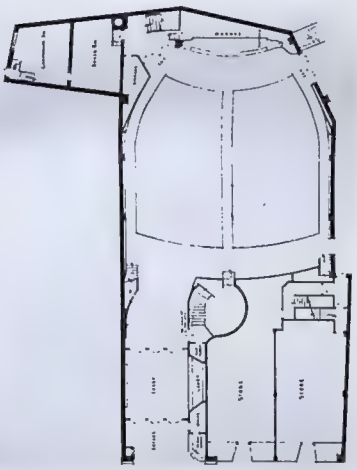
From the promenade a circular stairway in a rotunda leads to the television lounge, toilet rooms, and manager's office. The ladies' room has individual compartments with separate basins and toilets.

Bronze railings lead to the interior "stadium." Finishes consist of painted cement floor and wainscot. Walls and ceiling are of colored acoustical plaster with white coved and recessed lights.









REFERENCE DATA

OWNER: East Main Operating Co., Inc.
OPERATOR: The Pamela Amusement Co.
ARCHITECT: Wechsler & Schimmenti.
SEATING CAPACITY: 985.
COST OF BUILDING (including air conditioning): $225,000.
COST OF EQUIPMENT: $85,000.
SIZE OF LOT: 68′ x 160′.

Acoustical Material: Acoustical Plaster, Rockwool & Damask.
Carpets: Mohawk Carpet Co.
Chairs: Ideal Seating Co.
Changeovers: Essannay Electric Mfg. Co. Strong "Zipper."
Coinchanger: Johnson Fare Box Co.
Curtain Controls & Track: Automatic Devices Co.
Decorator: Wechsler & Schimmenti.
Draperies & Stage Curtains: Joe Hornstein, Inc.
Generators: Automatic Devices Co.
Lenses: Bausch & Lomb Optical Co. F 20 treated.
Lighting Fixtures: Adams Lighting, Inc.
Projection Lamps: Strong Electric Corp. Mogul.
Projection Machines: Motiograph, Inc. AA.



CREST •

Sacramento, Calif.

Safety, particularly against such catastrophies as earthquakes and fires, was a prime consideration in the design of the Crest. Opened during the month of July, 1949 in a thriving California community, its construction is sturdy throughout from the gunite reinforced side walls to the solid concrete floors.

Designed to stand out among the stores on either side, the front of the theatre has a perpendicular sign tower spelling out its name. Interchangeable plastic letters indicate in color the current attractions on the dual-face marquee. The floor approach is in colored terrazzo, while the marquee soffit is illuminated with neon tubes and spotlights.

Concealed lighting of lesser intensity leads the patron without eye strain through the lobby and foyer into the auditorium. A specially designed rich carpeting has been used in all of these areas to deaden the footsteps of patrons.

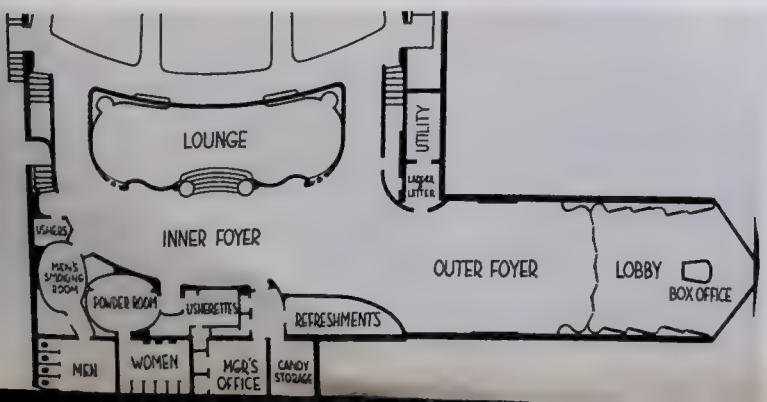
In addition to the customary lounges, washrooms, and offices, dressing rooms for ushers and usherettes have been included in the plan of the first floor. A "cry room" is located on the second.

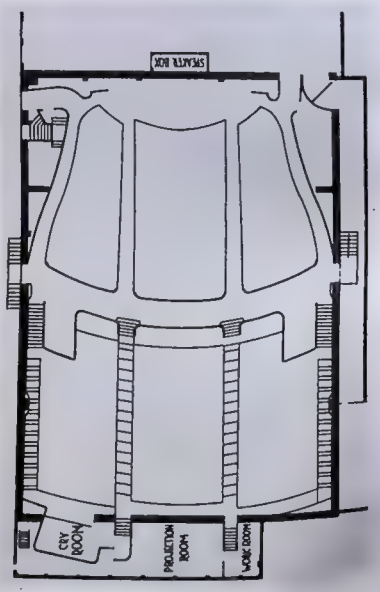
The ceiling of the "stadium-type" auditorium features cast gypsum ornamentation of broad design concealing elaborate neon lighting units and air-conditioning diffusers. Staff work, covered with gold leaf and glazed in warm transparent colors, adorns the side walls, which have been finished in ivory, gold, and pastel colors.

Excellent acoustics have been achieved through the use of Limpet plaster, while perfect sight lines have been gained by a fan-like arrangement of the seats. All stage draperies are lighted from a cove situated directly above the front of the narrow stage platform.



VERTICAL FLUTINGS, akin to those on the box-office, distinguish the front above the marquee.





REFERENCE DATA

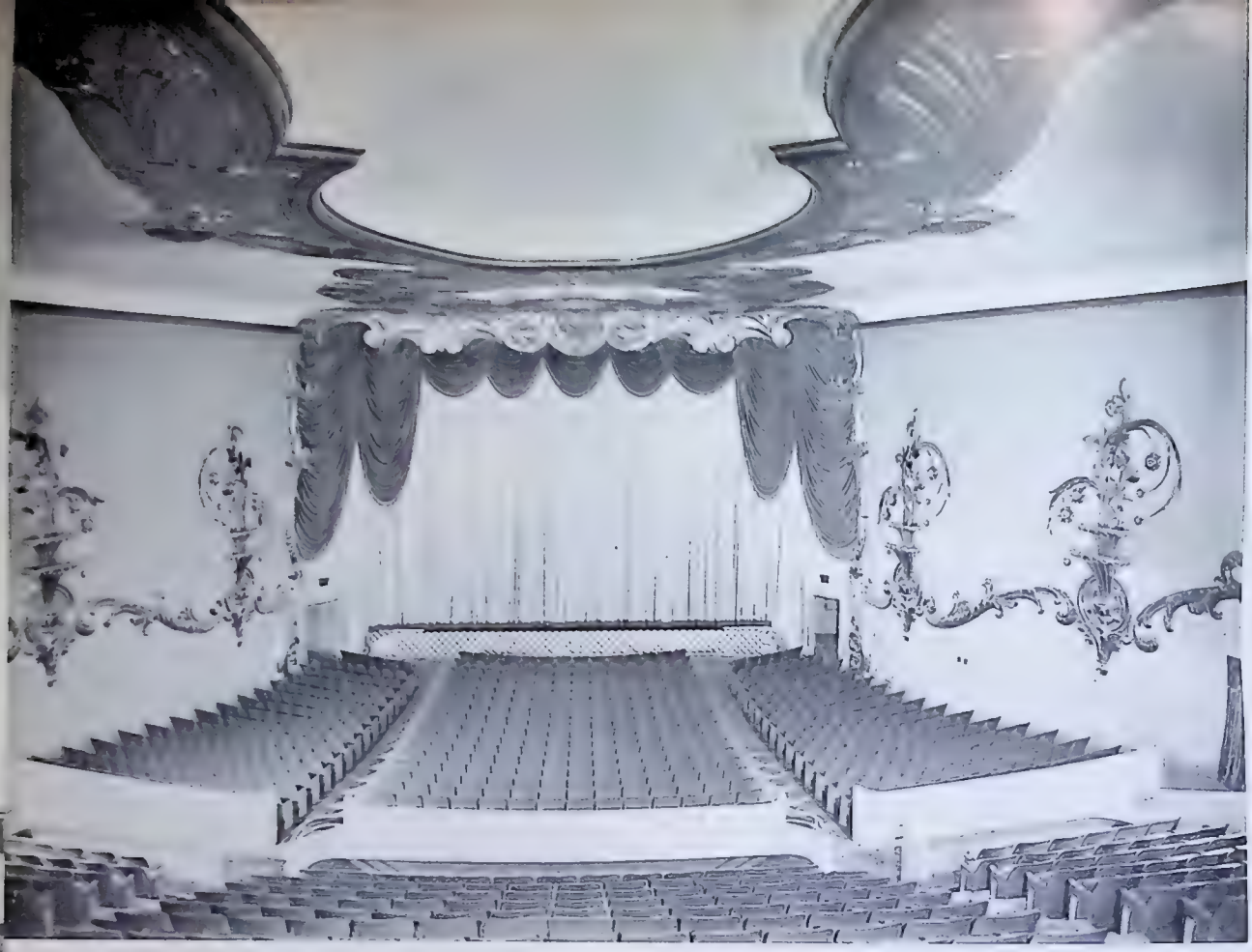
OPERATOR: Fox West Coast Theatres.
ARCHITECT: Cantin and Cantin.
SEATING CAPACITY: 1,217.
SUPERVISOR, CONSTRUCTION, EQUIPMENT, DECORATION: R. H. McCullough.
SIZE OF LOT: 90′ x 126′.

Acoustical Material: Limpet.
Air Conditioning: Westinghouse.
Carpets: Mohawk Carpet Co.
Chairs: American Seating Co. Bodiform.
Curtain Controls & Tracks: R. L. Grosh & Sons Scenic Studios.
Decorator: Fox West Coast Agency Corp.
Draperies & Stage Curtains: R. L. Grosh & Sons Scenic Studios.
Lenses: Bausch & Lomb Optical Co.
Lighting Fixtures: Luminart Neon Co.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Rectifiers: McColpin-Christie Corp., Ltd.
Screen: Nu-Screen Co.
Sign Letters: Theatre Specialties, Inc. Bevelite 10″, 17″.
Sound: International Projector Corp. Simplex 4 Star.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp.



A SIGN OF WELCOME greets the patron on his entrance into the handsomely appointed foyer. The vivid decorative theme used on the front of the candy bar has even been extended to the waste-basket as well as the wall behind the drinking fountain. The leafy design in the carpeting of the beautifully furnished lounge blends in well with those used on the wall panels and ceiling.





A VALANCE OF STAFF WORK, leafed with gold, has been installed at the head of the proscenium arch to receive the stage drapes and curtains in emerald green, blue, gold, and gray. The decorative scheme of the auditorium, as well as the rest of the house, is one of dynamic design that flows unbroken around the domes in the ceiling. The "cry room" is equipped with a glass partition and sound, so that occupants may continue to watch the show. A specially designed shelf and mirror in powder room permit cosmetic application without shadow interference.





1949-50 Index to Theatre Designers

A Cross-Referenced Listing by State and City of 238 Experienced Specialists and Their Projects

Although there are an infinite number of variations which may be made in the design and construction of most homes and commercial buildings to give them earmarks of individuality, there exist, nonetheless, certain common denominators which are present in all of them. Every type of home, for example, whether it be a simple row house or a luxurious mansion, must have level floors and an ample number of windows, just as a store or office building requires similar simple and basic elements, regardless of its size.

The theatre building, however, is uniquely different from the majority of others, in that it varies to a considerable degree from the normal type. Its special problems include those relating to sightlines, floor slopes, acoustics, wiring, etc. In addition to these distinguishing factors, theatres are governed by a seemingly endless variety of special codes and ordinances whose requirements must be taken into consideration in planning their design and construction.

Since both indoor and outdoor theatres are such highly specialized structures, it is, of course, desirable that their planning be handled by designers who have had a reasonable degree of experience in the theatre field. Throughout their years of publication, both THEATRE CATALOG and its sister publication, EXHIBITOR, have received numerous requests from owners and prospective new builders to recommend an experienced designer in their particular area.

The editors of these publications have replied to such requests with complete lists of all designers in specific areas, instead of recommending one specific individual or firm, for what they believe to be a thoroughly sound reason. In the light of the legendary premise that "one man's meat is another man's poison," a particular method of design which admirably suits one owner's purpose might not be at all in line with another's desires or requirements. Every theatreman knows, for example, that the degree to which the design of a theatre succeeds in blending itself into its general surroundings may have a great deal to do with its success or failure. To take a case in point, a designer experienced in planning the structure of metropolitan theatres alone would, in all probability, be far less qualified to design a theatre for a small rural village than one whose work had been primarily in this particular line.

Accompanying the aforementioned lists was a recommendation that the interested party communicate with each of the designers named and ask for a list of the theatres they had accomplished which might be reviewed and evaluated by the prospective builder. In this way, he could assure himself of finding the designer whose general approach appeared to be most in keeping with his own ideas and requirements for a theatre building.

BRIEF: ***In the pursuit of their sworn goal . . . the placing at the fingertips of theatremen the best and most complete fund of knowledge available on the physical aspects of the motion picture theatre . . . the editors of*** THEATRE CATALOG ***have often painstakingly compiled accurate and complete reference data of daily practical value . . . such as the listing of supply dealers contained elsewhere in this volume.***

In view of the enthusiastic reception accorded the foregoing and other compilations, the editors decided . . . with this Eighth Annual Edition . . . to publish a yearly guide to experienced theatre designers . . . A careful survey was made . . . by the questionnaire method . . . of all designers listed on the office files . . . The list of those who replied . . . representing 238 architects, engineers, and designers in 39 states and 3 provinces of Canada . . . is presented below.

In view of the mounting flood of such requests, however, the editors of THEATRE CATALOG decided to inaugurate, with this Eighth Annual Edition, a continuous, up-to-date record of all designers on their files who expressed a desire for such a listing. Accordingly, some 850 designers, known to have designed either theatres or auditoriums, were circularized and requested to supply their names, addresses, and dates of construction of all their theatre projects. The resultant list of the 238 who replied was broken down into particular state and city groups, so that readers may, upon finding an existing theatre which appeals to their tastes, look up the designer responsible, and have him draw up plans for their own buildings. The following index, although it by no means includes all designers in a particular locality, does represent all designers who replied to the questionnaire forms sent out. It embodies a listing of both new and remodeling projects they have done, the dates these projects were completed, and other helpful data that should enable the reader to evaluate the abilities of each by a personal check of their theatre buildings.

ALABAMA

DOUGLAS, WILMOT C.
226 N. 14th Street, Birmingham
Founded: 1939. **Member:** Alabama Society of Architects; American Institute of Architects. **Contributed:** THEATRE CATALOG—1945. **Theatres:** LAKE, Guntersville, Ala. (1949); COLLEGE, Birmingham, Ala. (1948); STAR, Haleyville, Ala. (1948); EUTAW, Eutaw, Ala. (1947); PRINCESS, Haleyville, Ala. (1941); ROYAL, Birmingham, Ala. (1941); HOMEWOOD, Homewood, Ala.

FRAHN, ALBERT R. and ASSTS.
602½ Second Avenue, Decatur
Founded: 1929. **Member:** A.I.A.; Alabama Assn. of Architects. **Theatres:** CENTER, Decatur, Ala. (1947); STRAND, Hartselle, Ala. (1944); CAPITOL, Decatur, Ala. (1943); PRINCESS, Decatur, Ala. (1940); ROXY, Decatur, Ala. (1940).

SIZEMORE, RAYMOND
16 S. Hull Street, Montgomery 5
Associates: Tom B. Kirkland, John R. Farris, Samuel D. Collier, Virgil O. Callaham. **Founded:** 1934. **Member:** A.I.A.; Alabama Society of Architects. **Contributed:** THEATRE CATALOG—1945. **Theatres:** NEELY, Marion, Ala. (1947); NEELY, Oneonta, Ala. (1946); RITZ, Centerville, Ala. (1944); STRAND, Uniontown, Ala. (1940).

ARIZONA

PLACE and PLACE
9 Grossetta, Tucson
Founded: 1917. **Member:** A.I.A.; Arizona Chap., A.I.A. **Theatres:** UNIVERSITY OF ARIZONA AUDITORIUM, Tucson, Ariz. (1937); PLAZA, Tucson, Ariz. (1930); HIGH SCHOOL AUDITORIUM, Tucson, Ariz. (1924).

ARKANSAS

ALLEN
(See BRUEGGEMAN, SWAIM and ALLEN)

BRANSON, UZZELL S.
First National Bank Building, Blytheville
Founded: 1923. **Member:** A.I.A.; Arkansas State Board of Architects. **Theatres:** McCUTCHEN, Charleston, Mo. (1948); NEW, Charleston, Mo. (1940); REX, Sikeston, Mo. (1939); MALONE, Sikeston, Mo. (1938); RITZ, Kennett, Mo. (1938); GEM, Osceola, Ark. (1936); RITZ, Blytheville, Ark. (1936); ROXY, Blytheville, Ark. (1935); GEM, Blytheville, Ark. (1930).

BRUEGGEMAN, SWAIM and ALLEN
331 Gazette Building, Little Rock
Founded: 1933. **Member:** A.I.A. **Contributed:** Architectural Record; Architectural Forum; THEATRE CATALOG—1942, 1946-47. **Theatres:** NEW, Ft. Smith, Ark. (1949); STRAND, Jonesboro, Ark. (1949); SAENGER, Hope, Ark. (1948); JOY, Ft. Smith, Ark. (1946); MALCO MUSIC HALL, Hot Springs, Ark. (1946); NABOR, Little Rock, Ark. (1946); STRAND, Owensboro, Ky. (1946); PARAMOUNT, Hot Springs, Ark. (1945).

CROMWELL
(See GINOCCHIO and CROMWELL)

GINOCCHIO and CROMWELL
201 Hall Building, Little Rock
Founded: 1941. **Member:** Arkansas, Oklahoma, Mississippi and Texas Chap., A.I.A., and N.C.A.R.B. **Theatres:** CAMEO, Magnolia, Ark. (1949); CENTER, Little Rock, Ark. (1949); RITZ, Malvern, Ark. (1948); ROYAL, Benton, Ark. (1948); RITZ, Bald Knob, Ark. (1947); JUROY, No. Little Rock, Ark.

(1946); HEIGHTS, Little Rock, Ark. (1946); NEW, Little Rock, Ark. (1946).

SWAIM
(See BRUEGGEMAN, SWAIM and ALLEN)

CALIFORNIA

BALCH, WILLIAM GLENN
2933 Rowena Avenue, Los Angeles 39
Associate: Louis L. Bryan. Founded: 1946. Member: A.I.A. Contributed: THEATRE CATALOG—1948-49. Theatres: ARVIN, Arvin, Calif. (1949); CENTURY DRIVE-IN, Inglewood, Calif. (1949); COMPTON DRIVE-IN, Compton, Calif. (1949); GAGE DRIVE-IN, Bell Gardens, Calif. (1949); MILPAS, Santa Barbara, Calif. (1949); OXNARD, Oxnard, Calif. (1949); RIALTO, Stockton, Calif. (1949); SAN PEDRO DRIVE-IN, San Pedro, Calif. (1949); TERRACE DRIVE-IN, Bakersfield, Calif. (1949); VICTORY DRIVE-IN, Ontario, Calif. (1949); BASELINE DRIVE-IN, Highland, Calif. (1948); EL MONTE DRIVE-IN, El Monte, Calif. (1948); GILMORE DRIVE-IN, Los Angeles, Calif. (1948); LAKEWOOD DRIVE-IN, No. Long Beach, Calif. (1948); RANCHO DRIVE-IN, San Diego, Calif. (1948); VALLEY DRIVE-IN, Ontario, Calif. (1948); VAN NUYS DRIVE-IN, Van Nuys, Calif. (1948).

LEE, S. CHARLES
1648 Wilshire Boulevard, Los Angeles 14
Founded: 1922. Contributed: THEATRE CATALOG—1941, 1942, 1947-48, 1948-49, 1949-50. Theatres: BAY, Pacific Palisades, Calif. (1949); RESEDA, Reseda, Calif. (1948); MIAMI, Miami, Fla. (1947); LINDA VISTA, Mexico City, Mexico (1942); FREMONT, San Luis Obispo, Calif. (1942); CARLOS, San Carlos, Calif. (1941); ACADEMY, Inglewood, Calif. (1939); BRUIN, Westwood, Calif. (1937); TOWER, Compton, Calif. (1936); LOS ANGELES, Los Angeles, Calif. (1931); FOX FLORENCE, Los Angeles, Calif. (1931); TOWER, Los Angeles, Calif. (1926). And several hundred others.
(See Featured Listing in 1949-50 Edition of THEATRE CATALOG.)

PEREIRA, W. L.
7421 Beverly Boulevard, Los Angeles 36
Associates: L. E. McConville, Frank Gruys. Founded: 1931. Member: A.I.A. Contributed: Architectural Forum. Theatres: ENCINO, Encino, Calif. (1949); PANORAMA, Van Nuys, Calif. (1949); HOLLYWOOD-PARAMOUNT, Los Angeles, Calif. (1941); PALMS, Phoenix, Ariz. (1941); PAN PACIFIC, Los Angeles, Calif. (1941); SURF, Chicago, Ill. (1941); LIDO, Michigan City, Ind. (1940); COZY, Louisville, Ky. (1939); CAPITOL, Jackson, Mich. (1938); MODEL, So. Haven, Mich. (1938); REGENT, Saginaw, Mich. (1938); VOGUE, Columbus, Ind. (1938); ESQUIRE, Chicago, Ill. (1937); LIBERTY, Libertyville, Ill. (1937); REX, Jackson, Mich. (1937); VOGUE, Detroit, Mich. (1937); VOGUE, Manistee, Mich. (1937); WEST ENGLEWOOD, Chicago, Ill. (1937); BERWYN, Berwyn, Ill. (1936); FOX, Aurora, Ill. (1936); MAIN, Evanston, Ind. (1936); WINDSOR, Chicago, Ill. (1936); PALACE, Peoria, Ill. (1935).

SMALE, CLARENCE J.
333 S. La Cienega Blvd., Los Angeles 48
Founded: 1920. Member: A.I.A. Theatres: CORNELL, Burbank, Calif. (1949); SOUTHSIDE, Los Angeles, Calif. (1949); COLORADO (formerly LAMANDA), Pasadena, Calif. (1948); RIO, Los Angeles, Calif. (1948); LOYOLA, Los Angeles, Calif. (1946).

GOODPASTOR, HERBERT E.
1812 Jay Street, Sacramento
Founded: 1932. Member: A.I.A.; California Council of Architects. Theatres: LUX, Sacramento, Calif. (1948); MANOR, Sacramento, Calif. (1948); TOWN HALL, Quincy, Calif. (1948); FRANKLIN, Marysville, Calif. (1947); COLONIAL, Sacramento, Calif. (1942).

CANTIN and CANTIN
704 Market Street, San Francisco 2
Founded: 1901. Member: A.I.A.; California Council of Architects. Contributed: Architectural Record; Architectural Forum; Architect and Engineers; THEATRE CATALOG—1942, 1945, 1948-49. Theatres: CORONET, San Francisco, Calif. (1949); COLMA, San Francisco, Calif. (1949); LAKE, San Francisco, Calif. (1949); AIRPORT AUTO-MOVIE, Oakland, Calif. (1949); STUDIO, San Jose, Calif. (1949); BURBANK, San Jose (1949); CREST, Los Banos, Calif. (1949); CREST, Sacramento, Calif. (1949); LUX, Oakland, Calif. (1948); QUINCY, Quincy, Calif. (1948); VOGUE, Pittsburg, Calif. (1947); PLACER, Placerville, Calif. (1947); ROXY, Santa Rosa, Calif. (1946); STATE, Red Bluff, Calif. (1946); LORENZO, San Lorenzo, Calif. (1946); ORINDA, Orinda, Calif. (1941); EL REY, Walnut Creek, Calif. (1941); TRACY, Tracy, Calif. (1941); NEW MADERA, Madera, Calif. (1941); DEL MAR, San Leandro, Calif. (1941); GRAND, San Francisco, Calif. (1940); LAUREL, Oakland, Calif. (1940); AMADOR, Jackson, Calif. (1939); CARMEL, Carmel, Calif. (1938); RITZ, Stockton, Calif. (1937); MOUNTAIN VIEW, Mountain View, Calif. (1930); SENATOR, Oakland, Calif. (1926); EGYPTIAN, Oakland, Calif. (1926).
(Plus 59 theatres which received major remodeling.)

QUANDT, FREDERICK W.
2800 Filbert Street, San Francisco 23
Founded: 1920. Member: A.I.A. Contributed: Time Magazine. Theatres: LAUREL, San Carlos, Calif. (1948); STOCKTON, Stockton, Calif. (1946); ORLAND, Orland, Calif. (1942); MANOR, San Mateo, Calif. (1940); ANGELS CAMP, Angels Camp, Calif. (1935).

RANEY, VINCENT G.
233 Post Street, San Francisco 8
Founded: 1936. Member: A.I.A.; No. California Chap. of A.I.A. Contributed: Architectural Record; Architectural Forum; THEATRE CATALOG—1945, 1948-49. Theatres: EL REY, Vallejo, Calif. (1949); PARK, Selma, Calif. (1948); PISMO, Pismo Beach, Calif. (1947); BAL, Oakland, Calif. (1946); RITA, Vallejo, Calif. (1946); KUHIO, Honolulu, T.H. (1945); SHAFTER, Delano, Calif. (1945); SIERRA, Delano, Calif. (1945); VOGUE, Salinas, Calif. (1939).

WOLF, WILLIAM W.
251 Kearny Street, San Francisco
Founded: 1930. Member: A.I.A. Theatres: ANALY, Sebastopol, Calif. (1949); BELMONT, Belmont, Calif. (1949); LOS ALTOS, Los Altos, Calif. (1949); YUBA, Yuba City, Calif. (under constr.); PALM, San Mateo, Calif. (under constr.).

COLORADO

STRONG, CHARLES D.
2138 Champa Street, Denver 2
Founded: 1928. Contributed: THEATRE CATALOG—1946-47. Theatres: BISON, McCook, Nebr. (1949); FOX MISSOULA, Missoula, Montana (1949); WYO, Laramie, Wyo. (1949); EL PASAEO, Santa Fe, New Mexico (1948); FEDERAL, Denver, Colo. (1948); GOLDEN, Golden, Colo. (1948); GRAND, Denver, Colo. (1948); FOX AURORA, Aurora, Colo. (1947); LAMAR, Lamar, Colo. (1947); MIDWEST, Scottsbluff, Nebr. (1946).

CONNECTICUT

ABRAMOWITZ, CHARLES H.
52 Goffe Terrace, New Haven
Founded: 1918. Member: Conn. Society of Practicing Architects; Conn. Society of Professional Engineers. Theatres: DRIVE-IN, Danbury, Conn. (1949); VILLE, Waterbury, Conn. (1949); BARNUM, Bridgeport, Conn. (1947); LORD, Norwich, Conn. (1947); DRIVE-IN, North Haven, Conn. (1946); CAMEO, West Haven, Conn. (1945); MAYFAIR, Bridgeport, Conn. (1941); PARKWAY, Bridgeport, Conn. (1941); RIALTO, Bridgeport, Conn. (1940); HIPPODROME, Bridgeport, Conn. (1939); DIXWELL, Hamden, Conn. (1938); HOWARD, New Haven, Conn. (1929); RIVOLI, West Haven, Conn. (1925); STRAND, Hamden, Conn. (1925).

HARRIGAN
(See HILL and HARRIGAN)

HILL and HARRIGAN
104 Audubon Street, New Haven
Founded: 1935. Member: Conn. Society of Prof. Engrs.; Amer. Society of Heating and Ventilating Engrs.; Illuminating Engineering Society. Contributed: Electrical World. Theatres: TOWER, Waterbury, Conn. (1946); LOEW'S NORWICH, Norwich, Conn. (1945); SALEM, Naugatuck, Conn. (1944); RIVOLI, Hartford, Conn. (1942); RIVOLI, West Haven, Conn. (1942); COMMUNITY, Fairfield, Conn. (1941); HOPE, Providence, R. I. (1941); MADISON, Madison, Conn. (1941); MERRITT, Bridgeport, Conn. (1941); RIALTO, Bridgeport, Conn. (1941); STATE, New Britain, Conn. (1941); STRAND, Winsted, Conn. (1940); STRATFORD, Stratford, Conn. (1940); WESTVILLE, New Haven, Conn. (1940); BANTAM, Bantam, Conn. (1939); BROOKLAWN, Bridgeport, Conn. (1939); HIPPODROME, Bridgeport, Conn. (1939); WHITNEY, Hamden, Conn. (1939); DIXWELL, Hamden, Conn. (1938); FOREST, West Haven, Conn. (1938); KLEIN MEMORIAL AUDITORIUM, Bridgeport, Conn. (1938).

CANNICI, HARRY S.
113 First Avenue, West Haven
Founded: 1917. Member: Conn. Society of Architects. Theatres: CAPITOL, Waterbury, Conn. (1939); GRAND, New Haven, Conn. (1938); CHESHIRE, Cheshire, Conn. (1935); STRATFORD, Stratford, Conn. (1921).

FLORIDA

HEIM, WILLIAM J.
Park Theatre Bldg., Main St., Avon Park
Founded: 1925. Member: Florida Assn. of Architects. Theatres: HILANS, Avon Park, Fla. (1949); VERO DRIVE-IN, Vero Beach, Fla. (1949); AUBURN, Auburndale, Fla. (1948); FLORIDA, Haines City, Fla. (1948); HARDEE, Wauchula, Fla. (1948); LINCOLN, Plataka, Fla. (1948); PASCO, Dade City, Fla. (1948).

SHINER, WALTER ROBINSON
1115 Cortez Street, Coral Gables
Founded: 1910. Theatres: MAIN STREET, Thomaston, Conn. (1940); MAIN STREET, Jewett City, Conn. (1939); ORANGE TURNPIKE, West Haven, Conn. (1937); MAIN STREET, Branford, Conn. (1934); MAIN STREET, East Haven, Conn. (1928).

BUNCH
(See KEMP, BUNCH and JACKSON)

JACKSON
(See KEMP, BUNCH and JACKSON)

KEMP, BUNCH and JACKSON
306 Florida Theatre Bldg., Jacksonville 2
Founded: 1946. Member: Florida North Chapter, A.I.A.; Florida Assn. of Architects. Contributed: Florida Architecture. Theatres: FLORIDA, W. Palm Beach, Fla. (1949); PALACE, Bradenton, Fla. (1949); CARVER, Tampa, Fla. (1948); FLORIDA, Miami, Fla. (1948); PARAMOUNT, Palm Beach, Fla. (1948); RITZ, Sarasota, Fla. (1948); FLORIDA, Tampa, Fla. (1947); PALACE, Tampa, Fla. (1947); STRAND, Tampa, Fla. (1947); EDGEWOOD, Jacksonville, Fla. (1946).

ANIS, ALBERT
420 Lincoln Road, Miami Beach
Founded: 1918. Theatres: FLAMINGO, Miami Beach, Fla. (1947); NORMANDY, Miami Beach, Fla. (1947); BEACH, Miami Beach, Fla. (Associate) (1940); PARAMOUNT, Miami Beach, Fla. (1940); FLAGLER, Miami, Fla. (1927).

FARKAS, GEORGE, Inc.
954 41st Street, Miami Beach
Founded: 1932. Member: Modern Architectural Research Society, London, England; American Designers Institute; American Institute of Decorators. Contributed: Architectural Forum; Interiors; Pencil Points; Progressive Architecture; House and Garden; The Architects' Journal, London, England; Kentiku Sekai, Japan; Architecture D'Oujourdui, Paris, France; Florida Architecture 1949; New York Times. Theatres: Interiors for Theatre in Recreation Centre of the Esso Club, Lage Oil and Transport Co., Ltd. Aruba, Netherland, West Indies (1949).
(Plus many other theatres in European cities.)

GILLER, NORMAN M.
1575 Washington Ave., Miami Beach
Founded: 1944. Member: A.I.A.; So. Florida Chapter A.I.A.; Florida Assn. of Architects; Designers and Decorators Guild of So. Florida; Architectural Society. Contributed: Engineering News Record; Individually Yours; Progress Architecture; Modern Pharmacy. Theatres: COPA CITY, Miami Beach, Fla. (1948).

HOHAUSER, HENRY and ASSTS.
4011 Chase Avenue, Miami Beach
Associates: Thomas J. Rowland, A.I.A.; Maurice S. Weintraub, A.I.A. Founded: 1922. Member: A.I.A.; South Florida Chap. A.I.A.; Florida Assn. of Architects. Contributed: Architectural Forum; Florida Architecture and Allied Arts; Construction. Theatres: MIAMI BEACH AUDITORIUM, Miami Beach, (Associate) (1949); VARIETY, Miami Beach, Fla. (1945).

WEED, ROBERT LAW and ASSTS.
1527 DuPont Building, Miami
Associates: T. Trip Russell, Frank E. Watson, Herbert H. Johnson. Founded: 1925. Member: A.I.A.; So. Florida Chapter A.I.A.; Florida Assn. of Architects; Architectural League of New York. Contributed: Architectural Forum; Progressive Architecture; Architectural Record; THEATRE CATALOG—1942. Theatres: UNIVERSITY OF MIAMI LECTURE HALL, Coral Gables, Fla. (1947); BEACH, Miami Beach, Fla. (1940); BOULEVARD, Miami, Fla. (1939); CORAL, Coral Gables, Fla. (1939); PARAMOUNT, Miami Beach, Fla. (1937); MAYFAIR, Miami, Fla. (1935).

SEELMANN, FREDERICK G.
Paramount Building, Palm Beach
Founded: 1925. Member: A.I.A.; Florida Assn. of Architects. Theatres: SURF, W. Palm Beach, Fla. (1948).

HUDDLESTON, PRENTISS and ASSTS.
212 North Adams Street, Tallahassee
Associates: Charles W. Saunders, H. C. Satterfield, Engr. Founded: 1936. Member: A.I.A.; Florida Assn. of Architects. Theatres: DRIVE-IN, Tallahassee, Fla. (1949); LEAF, Quincy, Fla. (1949); HIWAY, Thomasville, Ga. (1948); PARK, Pelham, Ga. (1946); LEON, Tallahassee, Fla. (1938).

GEORGIA

CHASE, WILLIAM J. J. and ASSTS.
140 Peachtree Street, N. W., Atlanta 3
Founded: 1909. Member: A.I.A. Theatres: CARVER, Atlanta, Ga. (1949); MUNICIPAL AUDITORIUM, East Point, Ga. (1946); CALLAWAY MEMORIAL AUDITORIUM, LaGrange, Ga. (1941); CLARE, Albany, Ga. (1940).

HOWELL
(See TUCKER and HOWELL, Inc.)

KEEL, WILFRED L.
843 Peachtree Street, N. E., Atlanta
Founded: 1942. Member: A.I.A. Theatres: VIENNA, Vienna, Ga. (1949).

TUCKER and HOWELL, Inc.
815 Rhodes Haverty Building, Atlanta
Founded: 1929. Member: A.I.A.; Georgia Engineering Society. Contributed: Physical Theatre Section of the EXHIBITOR. Theatres: CEDAR VALLEY DRIVE-IN, Rome, Ga. (1949); FIRST AVENUE, Rome, Ga. (1949); LAGRANGE DRIVE-IN, LaGrange, Ga. (1949); WEIS, Savannah, Ga. (1945); FINE ARTS BLDG. AUDITORIUM, Atlanta, Ga. (1937); ROYAL, Hogansville, Ga. (1936); PRESIDENT, Manchester, Ga. (1935); ROCKMART, Rockmart, Ga. (1935); MACON, Tuskegee, Ala. (1935); DE SOTO, Rome, Ga. (1929); LAGRANGE, LaGrange, Ga. (1929).

ILLINOIS

BLASS, ROY B.
30 N. La Salle Street, Chicago
Founded: 1934. Member: A.I.A.; North Shore Assn. of Architects; Illinois Society of Engineers. Contributed: Interiors; Architectural Forum; Architectural Record; Progressive Architecture; Signs of the Times. Theatres: BELL, Chicago, Ill. (1949); FAMOUS, Chicago, Ill. (1949); LAGRANGE, LaGrange, Ill. (1949); MARYLAND, Chicago, Ill. (1949); PARK FOREST, Park Forest, Ill. (Consultant) (1949); 152, Chicago, Ill. (1947); RKO GRAND, Chicago, Ill. (1946); LIDO, Maywood, Ill. (1946); LANE COURT, Chicago, Ill. (1945); GRAND, Chicago, Ill. (1941); KEN, Chicago, Ill. (1941); NEWBERRY, Chicago, Ill. (1941); RIDGE, Chicago, Ill. (1941); STATE, Chicago, Ill. (1940); VALENCIA, Evanston, Ill. (1940); CALIFORNIA, Chicago, Ill. (1939); CREST, Chicago, Ill. (1939); REX, Chicago, Ill. (1939); PARKWAY, Chicago, Ill. (1938); YORK, Elmhurst, Ill. (1938); HUB, Chicago, Ill. (1938); HEGEWISCH, Hegewisch, Ill. (1938); RIDGE, Chicago, Ill. (1937); ROSELAND, Chicago, Ill. (1937); PLAISANCE, Chicago, Ill. (1937); CALUMET, Hammond, Ind. (1937); SAVOY, Chicago, Ill. (1937); MARSHALL SQUARE, Chicago, Ill. (1937); APOLLO, Belvidere, Ill. (1937); JACKSON PARK, Chicago, Ill. (1937); TIFFIN, Chicago, Ill. (1937); VOGUE, Lincoln, Ill. (1936); PARK, Chicago, Ill. (1936); CRESCENT, Pontiac, Ill. (1935); FOREST, Forest Park, Ill. (1935).
(Plus about 50 smaller alterations.)

FREDRICK, ERWIN G.
225 N. Michigan Avenue, Chicago 1
Founded: 1925. Contributed: Architectural Record; Architectural Forum; THEATRE CATALOG—1948-49. Theatres: LAKE, Warsaw, Ind. (1948); HOSPITAL, Great Lakes, Ill. (1948); LANS, Lansing, Ill. (1947); PARK, North Chicago, Ill. (1946); ART, Hobart, Ind. (1942); ARON, Chesterton, Ind. (1942); FIFTH AVENUE, Gary, Ind. (1942); STATE, Richmond, Ind. (1941); CINE, Linton, Ind. (1939); INDIANA, Martinsville, Ind. (1939).

MONBERG, LAWRENCE
20 N. Wacker Drive, Chicago 6
Associate: Gustave L. Figas, chief draftsman. Founded: 1935. Member: A.I.A. Theatres: KUNSHOLM MARIONETTE OPERA, Chicago, Ill. (1948); INDIANA, Indiana Harbor, Ind. (1945); DELFT, Marquette, Mich. (1940); CO-ED, Champaign, Ill. (1938); JEFFERSON, Goshen, Ind. (1938); GAYETY, Chicago, Ill. (1937); TIVOLI, Michigan City, Ind. (1937).

RAPP and RAPP
230 N. Michigan Ave., Chicago 1
Associates: D. H. Brush, Jr., Charles A. McCarthy. Founded: 1907. Member: A.I.A.; Illinois Society of Architects; Chicago Chap., A.I.A.; Western Society of Engineers. Contributed: Architectural Forum; Architectural Record; Progressive Architecture; THEATRE CATALOG—1948-49. Theatres: HAMMOND DRIVE-IN, Hammond, Ind. (1949); NILES DRIVE-IN, Niles, Mich. (1948); ROSS AUDITORIUM, Great Lakes, Ill. (1944); VALENTINE, Toledo, Ohio (1942); LUNA, Chicago, Ill. (1938); RHODES, Chicago, Ill. (1938); PARAMOUNT, Seattle, Wash. (1934); AMBASSADOR, St. Louis, Mo. (1932); PARAMOUNT BROOKLYN, Brooklyn, N. Y. (1932); LOEW'S, Washington, D.C. (1928); MICHIGAN, Detroit, Mich. (1928); PALACE, Peoria, Ill. (1928); PALACE, Chicago, Ill. (1927); PARAMOUNT, New York, N. Y. (1927); CHICAGO, Chicago, Ill. (1921).
(Also some 185 other theatres.)

STENBECK, ERIC G.
327 S. LaSalle St., Room 903, Chicago 4
Founded: 1929. Contributed: Architectural Record. Theatres: MAJESTIC, Joliet, Ill. (1948); BROWN, Brownsberg, Ind. (1937); OHIO, Chicago, Ill. (1936); KEE, Kewanee, Ill. (1936); VOGUE, Indianapolis, Ind. (1936); LEBANON, Lebanon, Ind. (1936); AVENUE, Chicago, Ill. (1935); PARK, LaGrange, Ill. (1935); STANLEY, Galena, Ill. (1934).

FOLEY, CLETIS R.
125 N. Jefferson, Peoria
Founded: 1937. Member: A.I.A., Central Illinois Chapter. Theatres: ORPHEUM, Hannibal, Mo. (1949); STAR, Hannibal, Mo. (1948); NAKOMIS, Nakomis, Ill. (1948); COLONY, E. St. Louis, Ill. (1948); FRISINA, Taylorville, Ill. (1947); HAVANA, Havana, Ill. (1947); PALACE, Chillicothe, Ill. (1947); SENATE, Springfield, Ill. (1947); WANEE, Kewanee, Ill. (1947).

LANKTON, J. FLETCHER—JOHN N. ZIEGELE and ASSTS.
1100 Main Street, Peoria 5
Founded: 1930. Member: A.I.A.; Illinois Society of Architects. Contributed: Architectural Forum; Architectural Record; Progressive Architecture; Practical Builder; American Builder. Theatres: RADIO STATION WMBD, Peoria, Ill. (1948); RADIO STATION WIRL, Peoria, Ill. (1946); VARSITY, Peoria, Ill. (1938); ESQUIRE, Springfield, Ill. (1937); BEVERLY, Peoria, Ill. (1936).

ZIEGELE
(See J. FLETCHER LANKTON—JOHN N. ZIEGELE and ASSOCIATES)

INDIANA

HAGEL
(See WARWEG and HAGEL)

WARWEG and HAGEL
306 Grein Building, Evansville
Founded: 1925. Theatres: ROSS, Evansville, Ind. (1949); PRINCETON, Princeton, Ind. (1948); WILLIAM TELL, Tell City, Ind. (1947); NEW MOON, Vincennes, Ind. (1945); ROYAL, Evansville, Ind. (1943); CARLTON, Evansville, Ind. (1942); McLEANSBURRO, McLeansburro, Ill. (1942); PITNER, Fairfield, Ill. (1942).

HUTCHINSON, ROBERT F.
400 P. E. Building, Lebanon
Founded: 1944. Member: A.I.A.; Indiana Society of Architects. Theatres: JEWEL, Jamestown, Ind. (1947).

O'KEEFE, ALVES D.
401 E. Jefferson Street, Plymouth
Founded: 1938. Theatres: BUTLER, Butler, Ind. (1949); CULVER, Culver, Ind. (1949); REES, Plymouth, Ind. (1940).

IOWA

ALTFILLISCH, CHARLES
126½ W. Water Street, Decorah
Founded: 1923. Member: A.I.A. Theatres: OSAGE, Osage, Iowa (1948); GRAND, Decorah, Iowa (1939).

HARRISON
(See WETHERELL and HARRISON)

WETHERELL and HARRISON
Shops Building, Des Moines
Founded: 1927. Member: A.I.A.; Des Moines Architects Assn.; American Society of Civil Engineers. Contributed: THEATRE CATALOG—1941, 1946-47. Theatres: PARAMOUNT, Des Moines, Iowa (1949); COLUMBUS, Columbus, Nebr. (1948); STRAND, Hastings, Nebr. (1948); SUN, Holderege, Nebr. (1948); STRAND, Des Moines, Iowa (1947); COLLEGIAN, Ames, Iowa (1939); ROCKET, Rock Island, Ill. (1939); RIALTO, Pocahontas, Iowa (1938); MARION, Marion, Iowa (1937); CHARLES, Charles City, Iowa (1936).

KANSAS

MANN and COMPANY
201 First Street, Hutchinson
Founded: 1908. Member: A.I.A.; A.S.H.V.E.; Illuminating Engineer Society; A.S.C.E. Theatres: ULYSSES, Ulysses, Kan. (1948); FOX, Hutchinson, Kan. (Associate) (1929); STRAND, Hutchinson, Kan. (1929).

KENTUCKY

ABBOTT, LESLIE V.
2323 S. Brook Street, Louisville
Founded: 1909. Theatres: BURLEY, Shelbyville, Ky. (1947); SHELBY, Shelbyville, Ky. (1947).

GRIMES
(See OTIS and GRIMES)

OTIS and GRIMES
312 Tyler Building, Louisville 2
Founded: 1940. Member: A.I.A.; Kentucky Chap. A.I.A. Theatres: VALLEY, Taylorsville, Ky. (1946); ARCO, Bardstown, Ky. (1941).

LOUISIANA

WALKER and WALKER and ASSTS.
1608 Slattery Building, Shreveport
Founded: 1939. Member: A.I.A. Theatres:
(Two Theatres and one High School Auditorium under construction.)

MARYLAND

HARRISON, DAVID
421 St. Paul Place, Baltimore 2
Founded: 1925. Member: A.I.A. Contributed: THEATRE CATALOG—1940. Theatres: JEAN, Baltimore, Md. (1946); LEE, Pennington Gap, Va. (1946); NEW ALBERT, Baltimore, Md. (1945); VICTORY, Baltimore, Md. (1944); PATAPSCO, Baltimore, Md. (1943); WINDSOR, Baltimore, Md. (1941); RADIO, Baltimore, Md. (1939); DIANE, Baltimore, Md. (1938); MONROE, Baltimore, Md. (1938); LENOX, Baltimore, Md. (1937).

MILLER, HAL A.
2118 Maryland Avenue, Baltimore 18
Founded: 1925. Member: A.I.A.; Maryland Society of Architects. Theatres: HOMEWOOD, Baltimore, Md. (1947); PARAMOUNT, Baltimore, Md. (1947); EDGE-MAR, Edgewater, Middle River, Md. (1945); HILL, Cherry Hill, Baltimore, Md. (1944); APEX, Baltimore, Md. (1942); LORD BALTIMORE, Baltimore, Md. (1940).

MOEHLE
(See ZINK and MOEHLE)

ZINK and MOEHLE
2514 N. Charles Street, Baltimore 14
Founded: 1918. Member: A.I.A.; Baltimore Chap. A.I.A. Contributed: THEATRE CATALOG—1938, 1941, 1942, 1946-47, 1947-48, 1948-49. Theatres: ELK, Elkton, Md. (1949); PARKVILLE, Baltimore, Md. (1949); SMYRNA, Smyrna, Del. (1948); NAYLOR, Washington, D. C. (1946); APEX, Washington, D. C. (1944); COMMODORE, Portsmouth, Va. (1940); CAPITOL, Annapolis, Md. (1939); NORTHWAY, Baltimore, Md. (1939); SENATOR, Baltimore, Md. (1938); AMBASSADOR, Baltimore, Md. (1937).

MASSACHUSETTS

BROWNE
(See KROKYN, BROWNE and ROSENSTEIN)

KROKYN, BROWNE and ROSENSTEIN
184 Boylston Street, Boston
Founded: 1914. Member: Mass. State Assn. of Architects; Harvard Engineering Society. Contributed: Illuminating Engineer Society; THEATRE CATALOG—1941. Theatres: COLONIAL, Andover, Mass. (1931); HOLLYWOOD, Charlestown, Mass. (1930); STRAND, South Boston, Mass. (1930); COMMUNITY, No. Attleboro, Mass. (1929); ORIENTAL, Boston, Mass. (1929); SEVILLE, East Boston, Mass. (1929).
(Some of the above designed with Krokyn, & Browne Architects—Arthur Rosenstein Associate Architect, and others Krokyn, Browne & Rosenstein, Architects.)

RISEMAN, WILLIAM ASSTS., Inc.
162 Newbury Street, Boston
Founded: 1935. Contributed: Architectural Record; Progressive Architecture; Physical Theatre Section of the EXHIBITOR; THEATRE CATALOG—1947-48. Theatres: BEVERLY, Bridgeport, Conn. (1949); BIJOU, Springfield, Mass. (1949); CENTER, Brockton, Mass. (1949); EMPIRE, Fall River, Mass. (1949); HI-WAY, Bridgeport, Conn. (1949); MATTAPAN, Boston, Mass. (1949); PUBLIX, Boston, Mass. (1949); REGAL, Franklin, N. H. (1949); REVERE, Revere, Mass. (1949); STATE, Holyoke, Mass. (1949); STATE, Rochester, N. H. (1949); STATE, Waterbury, Conn. (1949); UNION, Attleboro, Mass. (1949); ASTOR, Boston, Mass. (1948); BEACON HILL, Boston, Mass. (1948); CENTER, Pawtucket, R. I. (1948); CONISTON, Newport, N. H. (1948); FINE ARTS, Maynard, Mass. (1948); GARDE, New London, Conn. (1948); MADISON, Madison, Conn. (1948); PURITAN, Boston, Mass. (1948); STRAND, Fall River, Mass. (1948); STRAND, Hartford, Conn. (1948); STRAND, Thompsonville, Conn. (1948); UPTOWN, Lynn, Mass. (1948); CAPITOL, Middletown, Conn. (1947); CENTER, Boston, Mass. (1947); KENMORE, Boston, Mass. (1947); STATE, Stoughton, Mass. (1947); STATE, Nashua, N. H. (1947); STRAND, Southbridge, Mass. (1947); WAREHAM, Wareham, Mass. (1947).

ROSENSTEIN
(See KROKYN, BROWNE and ROSENSTEIN)

WOOLF, ABRAHAM
27 School Street, Boston 8
Founded: 1945. Member: Boston Society of Civil Engrs.; American Society of Civil Engineers; American Concrete Institute. Theatres: BEACON HILL, Boston, Mass. (1948); STRAND, Fall River, Mass. (1948); ASTOR, Boston, Mass. (1947); STATE, Nashua, N. H. (1947).
(Acting Consultant for William Riseman Assts., Inc.)

KORSLUND, HARRY J.
506 Washington Street, Norwood
Founded: 1933. Member: Mass. Society of Architects; Tau Beta Pi (Honorary Engineers Society). Theatres: GORMAN, Framingham, Mass. (1947); PARK, E. Walpole, Mass. (1946); GUILD, Norwood, Mass. (1938).

MICHIGAN

GOODEYNE, JOSEPH C.
417 Bay City Bank Building, Bay City
Founded: 1921. Member: A.I.A.; Michigan Architect Society. Theatres: (Numerous School Auditoriums).

BENNETT and STRAIGHT
15624 Michigan Avenue, Dearborn
Founded: 1931. Member: Michigan Society of Architects, Detroit Chap. of A.I.A., Engineering Society of Detroit. Contributed: THEATRE CATALOG—1942. Theatres: FORT DRIVE-IN, Trenton, Mich. (1949); PALMS-STATE, Detroit, Mich. (1946); FROLIC, Midland, Mich. (1943); MIDLAND, Midland, Mich. (1942); BROADWAY, Mt. Pleasant, Mich. (1941); ALLEN PARK, Allen Park, Mich. (1941); BLOOMFIELD, Birmingham, Mich. (1941); MAIN, Royal Oak, Mich. (1941); MONROE, Monroe, Mich. (1940); VASSAR, Vassar, Mich. (1937); CIRCLE, Dearborn, Mich. (1936).

STRAIGHT
(See BENNETT and STRAIGHT)

AGREE, CHARLES N., Inc.
1140 Book Tower Building, Detroit 26
Associate: Eugene W. Mitton. Founded: 1919. Member: National Council Registration; States of Michigan, Ohio, Penna. and Florida, A.I.A.; Michigan Society of Architects; Michigan Engineering Society. Contributed: THEATRE CATALOG—1941, 1942, 1948-49. Theatres: WOODS, Grosse Pt. Woods, Mich. (1948); DUKE, Royal Oak, Mich. (1947); DEARBORN, Dearborn, Mich. (1940); KRIM, Highland Park, Mich. (1940); ROYAL, Detroit, Mich. (1940); HARPER, Detroit, Mich. (1939); BEVERLY, Detroit, Mich. (1937); PALMER PARK, Detroit, Mich. (1936); WESTTOWN, Detroit, Mich.

(1936); RIALTO, Flint, Mich. (1935); CRYSTAL, Detroit, Mich. (1934); HOLLYWOOD, Detroit, Mich. (1926).

HUGHES, TALMAGE C.
120 Madison Avenue, Detroit 26
Associate: Albert S. Johnson, Theatre Consultant. **Founded:** 1921. **Member:** A.I.A. **Contributed:** Journal of American Institute of Architects; Weekly Bulletin of Michigan Society of Architects; Physical Theatre Department of the EXHIBITOR; THEATRE CATALOG—1945, 1946-47. **Theatres:** FAMILY, Jackson, Mich. (1949); GRAYSTONE, Detroit, Mich. (1949); NEW, Eaton Rapids, Mich. (1949); OAKDALE, Detroit, Mich. (1949); DELUXE, Utica, Mich. (1948); EASTWOOD, East Detroit, Mich. (1948); FLATROC (2nd), Flat Rock, Mich. (1948); HUDSON, Hudson, Mich. (1948); NEW, New Baltimore, Mich. (1948); RIC, Richmond, Mich. (1948); CARLTON, Detroit, Mich. (1947); FOWLER, Fowler, Mich. (1947); GARDEN, Frankfort, Mich. (1947); POSEN, Posen, Mich. (1947); RYAN, Van Dyke, Mich. (1947); TOWN, Chesaning, Mich. (1947); ALGONAC, Algonac, Mich. (1946); ALMONT, Almont, Mich. (1946); DOWAGIAC, Dowagiac, Mich. (1946); EMSEE, Mt. Clemens, Mich. (1946); LAKE, Walled Lake, Mich. (1946); ROXY, St. Charles, Mich. (1946); STAR, Brooklyn, Mich. (1946); STATE, Wayne, Mich. (1946); BAD AXE, Bad Axe, Mich. (1945); BAGLEY, Detroit, Mich. (1943); LIBERTY, Centerline, Mich. (1942); MAIN, Coldwater, Mich. (1942); BEAVERTON, Beaverton, Mich. (1941); BERKLEY, Berkley, Mich. (1941); DANIEL, Saginaw, Mich. (1941); DRAYTON, Drayton Plains, Mich. (1941); ORR, Fowlerville, Mich. (1941); REED, Reed City, Mich. (1941); ROXY, Bay City, Mich. (1941); STRAND, Tecumseh, Mich. (1941); CAPITOL, Millington, Mich. (1940); GRAND, Brighton, Mich. (1940); KEEGO, Keego Harbor, Mich. (1940); MAXINE, Croswell. Mich. (1940); CASS, Cass City, Mich. (1939); FLATROC, Flat Rock, Mich. (1939); MOTOR CITY, Van Dyke, Mich. (1939); STRAND, Caro, Mich. (1939); BOGAR, Marshall, Mich. (1938); FREMONT, Fremont, Mich. (1938); IDEAL, Ithaca, Mich. (1938); ORPHEUM, Battle Creek, Mich. (1938); TIBBITS, Coldwater, Mich. (1938); OAKDALE, Hazel Park, Mich. (1937); JULIET, Romeo. Mich. (1936); MONTAUK, Hudson, Mich. (1936); BAGLEY, Detroit, Michigan (1935); MAJESTIC, Richmond, Mich. (1935).

ROGVOY, THEODORE
929 Fox Building, Detroit 1
Founded: 1930. **Member:** A.I.A.; Engineering Society of Michigan. **Contributed:** Physical Theatre Section of the EXHIBITOR; THEATRE CATALOG—1948-49. **Theatres:** PARADISE, Los Angeles, Calif. (under constr.); BOOKER-T, Detroit, Mich. (1949); EAST END, Detroit, Mich. (1949); GRAND RIVER DRIVE-IN, Farmington, Mich. (1949); LAKEWOOD, Detroit, Mich. (1949); OAK DRIVE-IN, Royal Oak, Mich. (1949); PLAZA, Detroit, Mich. (1949); SAVOY, Grand Rapids, Mich. (1949); TOWN DRIVE-IN, Detroit, Mich. (1949); GRATIOT DRIVE-IN, Frazer, Mich. (1948); ROXY, Detroit, Mich. (1948); WYANDOTTE, Wyandotte, Mich. (1943); ACE, Detroit, Mich. (1942); CALVIN, Detroit, Mich. (1942); FENKEL, Detroit, Mich. (1942); LINCOLN, Detroit, Mich. (1942); MEL, Melvindale, Mich. (1942); ORIOLF, Detroit, Mich. (1942); TUXEDO, Detroit, Mich. (1942); UPTOWN, Detroit, Mich. (1942); WOODROW, Detroit, Mich. (1942); MERCURY, Detroit, Mich. (1941). *(And at least 20 others.)*

BACHMANN, GEORGE J.
213-214 Dryden Building, Flint
Founded: 1909. **Member:** A.I.A.; Michigan Society of Architects; Saginaw Valley Branch of A.I.A. **Contributed:** Architectural Record; Architectural Forum. **Theatres:** KEARSLEY, Flint, Mich. (1949); ALLEN, Hale, Mich. (1947); KARSKADOR, Kaiser, W. Va. (1938); MICHIGAN, Flint, Mich. (1937); DELLA, Flint, Mich. (1934); ROXIE, Flint, Mich. (1934); CAPITOL, Owosso, Mich. (1927); STRAND, Owosso, Mich. (1927); EAGLE, Pontiac, Mich. (1925); STRAND, Pontiac, Mich. (1925); STATE, Pontiac, Mich. (1921); COLUMBIA, Flint, Mich. (1920); ORPHEUM, Pontiac, Mich. (1920); STRAND, Flint, Mich. (1918); RIALTO, Flint, Mich. (1918).

MINNESOTA

SHEFCHIK, THOMAS J.
307 Lansdale Building, Duluth 2
Founded: 1917. **Member:** A.I.A., Duluth Chap. **Theatres:** STATE ASSEMBLY HALL, Moose Lake, Minn. (1948).

KAPLAN
(See LIEBENBERG and KAPLAN)

LIEBENBERG and KAPLAN
51 S. 13th Street, Minneapolis
Founded: 1919. **Member:** Society of Architects; Tau-Beta-Pi (Honorary Engineering Society). **Contributed:** THEATRE CATALOG—1942. **Theatres:** CHIEF, Fergus Falls, Minn. (1949); PLAZA, Watertown, Minn. (1949); RIVERVIEW, Minneapolis, Minn. (1949); MINER, Rice Lake, Wis. (1948); CAMEO, Eau Claire, Wis. (1947); VILLAGE, Faribault, Minn. (1947); UPTOWN, Minneapolis, Minn. (1941); NORSHOR, Duluth, Minn. (1940); TIME, Rochester, Minn. (1939); GOPHER, Minneapolis, Minn. (1938); CHIEF, Bemidji, Minn. (1937); HOLLYWOOD, Minneapolis, Minn. (1937). *(And about 200 more.)*

FOSS and COMPANY
414½ Center Avenue, Moorhead
Founded: 1916. **Member:** Minnesota Assn. of Architects. **Theatres:** MUNICIPAL, Brooten, Minn. (1949).

PINAULT, LOUIS C.
St. Cloud
Founded: 1915. **Member:** A.I.A.; Specifications Institute. **Theatres:** STATE TEACHERS COLLEGE AUDITORIUM, St. Cloud, Minn. (1949); MELROSE HIGH SCHOOL AUDITORIUM, Melrose, Minn. (1939); NEW YORK MILLS HIGH SCHOOL AUDITORIUM, New York Mills, Minn. (1939); MILACA HIGH SCHOOL AUDITORIUM, Milaca, Minn. (1938); OSAKIS HIGH SCHOOL AUDITORIUM, Osakis, Minn. (1938); ST. CLOUD HIGH SCHOOL AUDITORIUM, St. Cloud, Minn. (1938).

ELLERBE and COMPANY
E-505 First National Bank Building, St. Paul 1
Founded: 1922. **Member:** A.I.A.; Gargoyle Club. **Contributed:** Architectural Forum; Architectural Record. **Theatres:** MAYO CIVIC AUDITORIUM, Rochester, Minn. (1939); SAUK CENTRE AUDITORIUM, Sauk Centre, Minn. (1939); AUDITORIUM and GYM, Aitkin, Minn. (1938); AUDITORIUM and GYM, Crosby, Minn. (1938); CIVIC AUDITORIUM and ARENA, Aberdeen, S. D. (1938); RANDOLPH, St. Paul, Minn. (1936); MUNICIPAL AUDITORIUM, St. Paul, Minn. (1931); PARAMOUNT, Austin, Minn. (1929); CHATEAU, Rochester, Minn. (1928).

MISSOURI

BOLLER, ROBERT and DIETZ LUSK, JR.
7332 Brooklyn Avenue, Kansas City
Founded: 1906. **Member:** A.I.A.; Missouri Assn. of Architects. **Theatres:** BEN BOLT, Chillicothe, Mo. (1949); CREST, Wichita, Kans. (1949); MAPLE, Mapleton, Iowa (1949); DREAM, Russell, Kans. (1948); PIONEER, Nebraska City, Nebr. (1948); YANKTON, Yankton, S. Dak. (Consultant) (1948); CENTER, Oklahoma City, Okla. (1947); COLONY, Easley, S. C. (1945); STATE, Lincoln, Nebr. (1941); ARROW, Cheroquee, Iowa (1940); ESQUIRE, St. Louis, Mo. (1939); FOX, Jacksonville, Ill. (1938); ELKIN, Aberdeen, Miss. (1935); UTE, Colorado Springs, Colo. (1935); FORT, Fort Peck, Mont. (1934); STADIUM, Los Angeles, Calif. (1931); COLEMAN, Miami, Okla. (1928); PLAZA, Kansas City, Mo. (Consultant) (1928); KIMO, Albuquerque, N. Mex. (1927); LOEWS-MIDLAND, Kansas City, Mo. (Consultant) (1927); MAJESTIC, East St. Louis, Ill. (1927); MISSOURI, St. Joseph, Mo. (1926); TEXAS, San Antonio, Tex. (1926); JOIE, Fort Smith, Ark. (1921); WHITE, Fresno, Calif. (1914); KIETH, Grand Rapids, Mich. (1913); WICHITA, Wichita Falls, Tex. (1907); GRAND, Concordia, Kans. (1906). *(And over 400 theatres not listed.)*

HARDY and SCHUMACHER
410 Scarritt Arcade Bldg., Kansas City
Founded: 1918. **Member:** A.I.A. **Theatres:** UNIVERSITY OF KANSAS PLAYHOUSE, Kansas City, Mo. (1949).

LUSK, DIETZ, JR.
(See ROBERT BOLLER and DIETZ LUSK, JR.)

SCHUMACHER
(See HARDY and SCHUMACHER)

ABRAMS, LEO F.
1207 Delmar Boulevard, St. Louis 3
Founded: 1921. **Contributed:** THEATRE CATALOG — 1945. **Theatres:** ALTWOOD, Wood River, Ill. (1949); COLUMBIA, St. Louis, Mo. (1949); CRITERION, St. Louis, Mo. (1949); RIVER LANE, Rockford, Ill. (1948); STARVIEW, Lincoln, Nebr. (1948); CITY, Granite City, Ill. (1947); TOWER, St. Louis, Mo. (1946); WASHINGTON, Granite City, Ill. (1945); AUBERT, St. Louis, Mo. (1944); MANCHESTER, St. Louis, Mo. (1943); RICHMOND, St. Louis, Mo. (1942); MAFFITT, St. Louis, Mo. (1941); SHENANDOA, St. Louis, Mo. (1941); MIKADO, St. Louis, Mo. (1940); PAGEANT, St. Louis, Mo. (1940); UNION, St. Louis, Mo. (1939).

BLOOM, BERNARD
705 Chestnut Street, St. Louis
Founded: 1936. **Member:** Missouri Association of Architects. **Theatres:** CREST, Affton, Mo. (1946).

GRAF, HUGO K.
2825 Olive Street, St. Louis 3
Founded: 1914. **Member:** A.I.A.; Architectural League of N.Y.; Registered in Mo., Ill., Calif., Ind., Mass. **Contributed:** Architectural Record. **Theatres:** ROGERS, Poplar Bluff, Mo. (1949); COLUMBIA, St. Louis, Mo. (1948); MUNICIPAL, St. Louis, Mo. (1947); WELLSTON, St. Louis, Mo. (1946).

MONTANA

WILLSON, FRED F.
P. O. Box 497, Bozeman
Founded: 1910. Member: A.I.A.; Montana Chap. A.I.A. Theatres: ELLEN, Bozeman, Mont. (1918).
(Plus alterations to various theatres in area—and considerable stage and auditorium work in schools.)

NEBRASKA

RAAPKE, H. A.
1611 Davenport Street, Omaha
Founded: 1908. Member: A.I.A.; Nebraska, Iowa and South Dakota Chap., A.I.A. Theatres: VALLEY, Valley, Nebr. (1948); BEACON, Omaha, Nebr. (1947); BELLE, Bellevue, Nebr. (1947); DAKOTA, Yankton, S. Dak. (1946); IOWA, Onawa, Iowa (1946); ROYAL, LeMars, Iowa (1946); NORTH STAR, Omaha, Nebr. (1945); PALACE, Syracuse, Nebr. (1945); MOON, Neligh, Nebr. (1944); MULLER, Omaha, Nebr. (1937).

NEW JERSEY

ALBERT
(See HETTEL and ALBERT)

DRIVE-IN THEATRE SERVICE CO.
840 Cooper Street, Camden 2
Associates: Taylor Engineering Associates, Consultants, Park and Norwood Aves., Merchantville; W. W. Smith, V. C. Smith, S. Herbert Taylor. Founded: 1933. Member: Amer. Soc. of Civil Engrs., Institute of Traffic Engineers, Nat'l Soc. of Prof. Engrs., N. J. Soc. of Prof. Engrs. Contributed: Society of M. P. Engineers, THEATRE CATALOG—1946-47, 1948-49. Theatres: 309 DRIVE-IN, Montgomery Twp., Pa. (1950); 46 DRIVE-IN, Bridgeton, N. J. (1950); ELMSFORD DRIVE-IN, Elmsford, N. Y. (1950); SOMERSET DRIVE-IN, Somerset, Mass. (1950); DELSEA DRIVE-IN, Vineland, N. J. (1949); FAMILY DRIVE-IN, Clifton Hts., Pa. (1949); LAWRENCE DRIVE-IN, Trenton, N. J. (1949); BOULEVARD DRIVE-IN, Miami, Fla. (1948); DRIVE-IN, Totowa, N. J. (1948); SHORE DRIVE-IN, Asbury Park, N. J. (1948); STARLITE DRIVE-IN, Gloucester, N. J. (1948); DI Company DRIVE-IN, Paramus, N. J. (1947); MORRIS PLAINS DRIVE-IN, Morristown, N. J. (1947).
(Plus complete grading plans for over 300 drive-ins in nearly every state of the Union.)

HETTEL and ALBERT
501 Cooper Street, Camden 2
Founded: 1921. Member: New Jersey Chap. A.I.A.; New Jersey Society of Architects; West Jersey Society of Architects. Theatres: SEVILLE (now BOYD), Easton, Pa. (1928); DAVENPORT, Stamford, Conn. (1929).

TAYLOR ENGINEERING ASSTS.
(See DRIVE-IN THEATRE SERVICE CO.)

SCHENKER, SIDNEY
91 Broadway, Paterson
Founded: 1933. Member: New Jersey State Society of Architects; Architectural League of Northern New Jersey. Contributed: Pencil Points, Architectural Record. Theatres: ALLWOOD, Clifton, N. J. (1949); PLAZA, Paterson, N. J. (1949); HYWAY, Fairlawn, N. J. (1942); MAYFAIR, Trenton, N. J. (1941).

NEW MEXICO

BRITTELLE, GINNER and NEUNER
900 West Park Avenue, Albuquerque
Founded: 1928. Member: A.I.A. Theatres: STATE, Albuquerque, N. M. (1949); YUCCA, Albuquerque, N. M. (1947); CHIEF, Albuquerque, N. M. (1940); CASTLE, Raton, N. M. (1929); LENSIC, Santa Fe, N. M. (1929); KIMO, Albuquerque, N. M. (1928).

GINNER
(See BRITTELLE, GINNER and NEUNER)

NEUNER
(See BRITTELLE, GINNER and NEUNER)

KRUGER, W. C. and ASSTS.
P. O. Box 308, Santa Fe
Associates: Robert W. Graef, Kenneth S. Clark. Founded: 1938. Member: A.I.A.; National Fire Protection Assn.; American Planning and Civic Assn. Contributed: Architectural Forum; The Nations Schools. Theatres: CIVIC AUDITORIUM, Los Alamos, N. M. (1949); CENTER, Los Alamos, N. M. (1948); HIGH SCHOOL LECTURE HALL, Los Alamos, N. M. (1948); BURRO ALLEY, Santa Fe, N. M. (1939); HIGH SCHOOL AUDITORIUM, Raton, N. M. (1938).

NEW YORK

EINHORN, LEON M.
93 State Street, Albany
Founded: 1939. Member: A.I.A.; New York State Architects Assn.; Albany Architects Chap., A.I.A. Contributed: Architectural Record, Architectural Forum, Pencil Points, Physical Theatre Section of EXHIBITOR, THEATRE CATALOG — 1947-48. Theatres: FISHKILL DRIVE-IN, Beacon, N. Y. (1949); HUNTER, Hunter, N. Y. (1949); 9W DRIVE-IN, Kingston, N. Y. (1949); NORTH DRIVE-IN, Syracuse, N. Y. (1949); READING DRIVE-IN, Reading, Pa. (1949); ROUTE 1A DRIVE-IN, New London, Conn. (1948); BERKSHIRE DRIVE-IN, Pittsfield, Mass. (1947); WOOD BRIDGE DRIVE-IN, Woodbridge, N. J. (1947) LINCOLN DRIVE-IN, Philadelphia, Pa. (1944); MOHAWK DRIVE-IN, Colonie, N. Y. (1943).

CONRAD and CUMMINGS
99 Collier Street, Binghamton
Founded: 1911. Member: A.I.A.; New York State Assn. of Architects; Central New York Chap., A.I.A. Theatres: SUBURBAN, Binghamton, N. Y. (1928); GOODWILL, Johnson City, N. Y. (1921).

CUMMINGS
(See CONRAD and CUMMINGS)

LACEY, A. T. and SONS
52 Exchange Street, Binghamton
Founded: 1895. Member: A.I.A. Contributed: THEATRE CATALOG — 1948-49. Theatres: THORNTON, Windsor, N. Y. (1947); HARDEN, Callicoon, N. Y. (1946); SYMPHONY, Binghamton, N. Y. (1917).

MALKIND, SAMUEL LEWIS
184 Joralemon Street, Brooklyn 2
Founded: 1920. Member: Brooklyn Society of Architects; Pratt Architectural Club. Theatres: PARSONS, Jamaica, N. Y. (1949); UPTOWN, New York, N. Y. (1948); KISMET, Brooklyn, N. Y. (1947); HOLLYWOOD, Brooklyn, N. Y. (1946); ORIENT, New York, N. Y. (1945); CANARSIE, Brooklyn, N. Y. (1944); COLLISEUM, Brooklyn, N. Y. (1944); COLLEGE, College Point, N. Y. (1943); ST. ALBANS, St. Albans, N. Y. (1942); VOGUE, Bronx, N. Y. (1941).

ROTHENBERG, MORRIS
2241 East 29th Street, Brooklyn 29
Founded: 1936. Member: New York Society of Architects. Theatres: BURNSIDE, Burnside, Conn. (1949); GLASTENBURY, Glastenbury, Conn. (1939); WINDSOR, Windsor, Conn. (1936).

SPANN, WILLIAM T.
225 Delaware Avenue, Buffalo
Founded: 1922. Member: A.I.A.; New York State Society of Architects; Buffalo-Western New York Chap., A.I.A. Contributed: THEATRE CATALOG—1940. Theatres: ELMIRA HEIGHTS, Elmira, N. Y. (1949); LANCASTER, Lancaster, N. Y. (1949); STARLIGHT DRIVE-IN, Buffalo, N. Y. (1948); LOVEJOY, Buffalo, N. Y. (1947); MARLOWE, Buffalo, N. Y. (1941); STEUBEN, Hornell, N. Y. (1939); BASIL'S VARSITY, Buffalo, N. Y. (1937); SHEA'S SENECA, Buffalo, N. Y. (1930); SHEA'S KENSINGTON, Buffalo, N. Y. (1929); SHEA'S BAILEY, Buffalo, N. Y. (1928); BASIL'S GENESSE, Buffalo, N. Y. (1927); SHEA'S ROSEVELT, Buffalo, N. Y. (1927); SHEA'S NORTH PARK, Buffalo, N. Y. (1921).

TANNER, CARL W.
1406 Maple Avenue, Elmira
Founded: 1929. Member: Registered Architect in New York and Pennsylvania. Theatres: CAPITOL, Elmira, N. Y. (1949); FRONT STREET DRIVE-IN, BINGHAMTON, N. Y. (1949).

BULLOCK, E. C. A.
119 W. 57th St., Rm. 1611, New York 19
Founded: 1926. Member: Architectural League of New York. Contributed: Physical Theatre Section of EXHIBITOR; THEATRE CATALOG—1947-48. Theatres: ORITANI, Hackensack, N. J. (1949); PORT, Newburyport, Mass. (1949); RIVIERA, New York, N. Y. (1949); STATE, Jersey City, N. J. (1949); COLONIAL, Hagerstown, Md. (1948); ELM, West Hartford, Conn. (1948); LIBERTY, Elizabeth, N. J. (1947); UNION, Union, N. J. (1947); CAPITAL, Belleville, N. J. (1946); HAWTHORNE, Newark, N. J. (1946); HOLLYWOOD, East Orange, N. J. (1946); WARNER BROTHERS, Havana, Cuba (Consultant) (1946); U. S., Hoboken, N. J. (1945).

CHAPMAN, EVANS and DELEHANTY
50 Broadway, New York 4
Founded: 1892. Member: A.I.A. Theatres: BROOKLYN COLLEGE AUDITORIUM, Brooklyn, N. Y. (1948).
(Auditoriums for many schools.)

DELEHANTY
(See CHAPMAN, EVANS and DELEHANTY)

EBERSON, JOHN and DREW
2 W. 47th Street, New York
Founded: 1904. Member: A.I.A.; Architectural League. Contributed: THEATRE CATALOG—1938, 1940, 1941, 1942, 1945, 1946-47, 1947-48, 1948-49. Theatres: CELINA Celina, O. (1949); EL ROBLE, Mexico City, D. F. (1949); JUNIN, Caracas, Venezuela (1949); CORAL, Bradbury Heights, Md. (1948); ORFEON, Mexico City, D. F. (1947); ANACOSTIA, Washington, D. C. (1946); CENTRAL, Passaic, N. J. (1941); COHOES, Cohoes, N. Y. (1941); BEVERLY, Washington, D. C. (1940); HIGHLAND, Washington, D. C. (1940); AUBURN, Auburn, N. Y. (1938); HARRIS, Pittsburgh, Pa. (1938); NOSTRAND, Brooklyn, N. Y. (1938); OSWEGO, Oswego, N. Y. (1938); PERRY, Pittsburgh, Pa. (1938); RIALTO, Amsterdam, N. Y. (1938); COLONY, Cleveland, O. (1937); PALACE, Minne-

apolis, Minn. (1933); REX, Paris, France (1932); DAYTONA, Daytona Beach, Fla. (1930); PARAMOUNT, Nashville, Tenn. (1930); LOEW'S PARADISE, Bronx, New York, N. Y. (1928); PARADISE, Chicago, Ill. (1928); STATE, Kalamazoo, Mich. (1927); CAPITOL, Flint, Mich. (1926); MAJESTIC, San Antonio, Texas (1924); ORPHEUM, Wichita, Kans. (1922).
(Over 500 theatres throughout the U. S., South America, Europe and Australia.)

EVANS
(See CHAPMAN, EVANS and DELEHANTY)

FURMAN, JOSEPH J.
303 W. 42nd Street, New York 18
Associate: Lawrence H. Furman. Founded: 1918. Member: New York Society of Architects; New York State Assn. of Architects. Theatres: DALE, New York City, N. Y. (Associate) (1937); COLONY, White Plains, N. Y. (1936); FOX APPLETON, Appleton, Wis. (Associate) (1929); FOX GREEN BAY, Green Bay, Wis. (Associate) (1929).

HOFFBERG
(See SCHLANGER-HOFFBERG)

HOHAUSER, WILLIAM I.
1841 Broadway, New York
Founded: 1920. Member: New York Society of Architects; A.I.A.; National Society of Professional Engineers. Contributed: Architectural Record; THEATRE CATALOG—1940, 1941, 1946-47, 1947-48. Theatres: PARK AVENUE, Manhattan, New York, N. Y. (1947); HAMILTON, Hamilton, N. J. (1946); ACE, Queens, N. Y. (1944); BRUNSWICK, Trenton, N. J. (1940); CAMEO, Brewster, N. Y. (1939); CLINTON, Brooklyn, N. Y. (1939); AVON, Stamford, Conn. (1938); HUDSON COMMUNITY, Hudson, N. Y. (1938); KIMBALL, Yonkers, N. Y. (1937); PILGRIM, Bronx, N. Y. (1937); CENTRAL, Yonkers, N. Y. (1936); CREST, Bronx, N. Y. (1936); TRIBUNE, New York, N. Y. (1935); BEACON, Beacon, N. Y. (1934); SYMPHONY, Manhattan, New York, N. Y. (1934); LANE, New York, N. Y. (1933).
(Plus nearly 100 other theatres.)

LESCAZE, WILLIAM
211 East 48th Street, New York 17
Founded: 1923. Member: New York State Assn. of Architects; A.I.A.; Society of Mexican Architects; Fellow Royal Society of Arts. Contributed: THEATRE CATALOG—1945. Theatres: CALDERONE, Hempstead, L. I., N. Y. (1949); CBS RADIO No. 4, New York, N. Y. (1940); CBS RADIO A, Hollywood, Calif. (1938); CBS RADIO No. 3, New York, N. Y. (1938); CBS RADIO No. 2, New York, N. Y. (1936); FIRST TRANSLUX, New York, N. Y. (1932).

MAYER and WHITTLESEY
31 Union Square, New York 3
Associate: M. Milton Glass. Founded: 1934. Member: A.I.A.; Beaux-Arts Institute of Design; American Institute of Planners. Theatres: RKO PATHE STUDIOS, New York, N. Y. (1945).

MURNO, JAMES J.
1564 Broadway, New York, N. Y.
Founded 1945. Member: New York Society of Architects; New York State Federation of Architects. Contributed: Architectural Forum; THEATRE CATALOG — 1948-49. Theatres: RKO MAIN STREET, Kansas City, Mo. (1949); RKO ORPHEUM, New Orleans, La. (1949); PARIS, New York, N. Y. (1948); RKO GREENPOINT, Brooklyn, N. Y. (1948); RKO ORPHEUM, St. Paul, Minn. (1948); RKO BOSTON, Boston, Mass. (1947).

SCHIMMENTI
(See WECHSLER and SCHIMMENTI)

SCHLANGER-HOFFBERG
250 W. 57th Street, New York 19
Founded: 1931. Member: A.I.A.; Beaux-Arts Institute of Design; National Council of Architectural Registration Boards; American Society of Civil Engineers. Contributed: Journal of Society of Motion Picture Engineers; Architectural Record; Architectural Forum; THEATRE CATALOG—1938, 1940, 1941. Theatres: ISLAND, Hamilton, Bermuda (1949); NIANTIC, Niantic, Conn. (1949); REGAL, Bombay, India (1949); CROWN, New Haven, Conn. (1948); CARL FISCHER CONCERT HALL, New York, N. Y. (1948); TACNA, Lima, Peru (1948); STUDIO, New York, N. Y. (1947); LUX, Panama City, Panama (1943); VICTORY, New London, Conn. (1943); NJA BIO, Rejkavik, Iceland (1942); RIVOLI, New Haven, Conn. (1942); STRAND, Kutztown, Penna. (1942); WESTVILLE, New Haven, Conn. (1942); BROCKWAY, Brockway, Penna. (1941); PIX, White Plains, N. Y. (1941); PIX, Rock Hill, S. C. (1941); WHITNEY, New Haven, Conn. (1941); KENT, Montreal, Quebec (1940); STUDIO, Philadelphia, Pa. (1940); VILLEREY, Montreal, Quebec (1940); LITTLE CARNEGIE PLAYHOUSE, New York, N. Y. (1939); EMPIRE, Montreal, Quebec (1938); NORMANDIE, New York, N. Y. (1938); UNITED ARTISTS REVIEW, New York, N. Y. (1938); WALDO, Waldoboro, Me. (1938); FORREST, Queens, N. Y. (1937); BELL, Brooklyn, N. Y. (1936); TOWER, Miami, Fla. (1936); JEWEL, Brooklyn, N. Y. (1935); SUTTON, New York, N. Y. (1934); THALIA, New York, N. Y. (1933); ST. GEORGE PLAYHOUSE, Brooklyn, N. Y. (1931).

SLOAN, JOHN
420 Lexington Avenue, New York 17
Member: A.I.A. Theatres: GRAND CENTRAL STATION NEWSREEL, New York City, N. Y. (1939); NEW YORK STATE EXHIBIT BLDG. AMPHITHEATRE and STAGE, Long Island City, N. Y. (1939); PENNA. STATE TEACHERS COLLEGE, Indiana, Pa. (1938).

SORNIK, MAURICE D.
Empire State Building, New York 1
Founded: 1944. Member: A.I.A.; Beaux-Arts Institute of Design. Theatres: CENTRAL ISLIP, Central Islip, L. I., N. Y. (under constr.); DARIEN, Darien, Conn. (1949); CORT, Somerville, N. J. (1948); LINDEN-HURST, Lindenhurst, L. I., N. Y. (1948); CENTER, Bloomfield, N. J. (1946).

WECHSLER and SCHIMMENTI
17 East 42nd Street, New York 17
Founded: 1938. Member: A.I.A.; New York Society of Architects. Theatres: TRYONS, Amsterdam, N. Y. (1949).

WHITTLESEY
(See MAYER and WHITTLESEY)

LARKE, RUSSELL G.
751 7th Avenue, Niagara Falls, N. Y.
Founded: 1925. Member: Buffalo Chap., A.I.A.; New York State Society of Architects. Contributed: THEATRE CATALOG—1938, 1945. Theatres: DIPSON BATAVIA, Batavia, N. Y. (1944); CALVIN, Kenmore, N. Y. (1942); STRAND, Buffalo, N. Y. (1939); LASALLE Niagara Falls, N. Y. (1938); HIPPODROME, Niagara Falls, N. Y. (1937).

BARROWS
(See CARPENTER and BARROWS)

CARPENTER and BARROWS
10 Reynolds Arcade, Rochester
Founded: 1914. Member: Central N. Y. Chap., A.I.A.; Rochester Society of Architects; New York State Assn. of Architects. Contributed: Architectural Record; Architectural Forum. Theatres: PARAMOUNT, Rochester, N. Y.
(And numerous churches and schools.)

DE ANGELIS, MICHAEL J.
221-25 Cutler Building, Rochester
Founded: 1927. Member: New York State Assn. of Architects; N.C.A. Registration Boards; Penna. Assn. of Architects; Ohio Assn. of Architects. Contributed: Physical Theatre Section of EXHIBITOR; THEATRE CATALOG—1940, 1941, 1942, 1945, 1946-47, 1948-49. Theatres: BELMONT, Youngstown, O. (1949); SHEA, Ashtabula, O. (1949); MANCUSO, Batavia, N. Y. (1948); PARAMOUNT, Buffalo, N. Y. (1947); PARAMOUNT, Rochester, N. Y. (1947); NIXON, Philadelphia, Pa. (1946); ROOSEVELT, Philadelphia, Pa. (1946); TOWER, Philadelphia, Pa. (1946).
(And nearly 200 theatres in 20 years.)

SMITH and WALKER
1134 Lake Avenue, Rochester 13
Founded: 1919. Member: New York State Professional Engineering Assn. Contributed: THEATRE CATALOG—1946-47. Theatres: EMPIRE DRIVE-IN, Rochester, N. Y. (1949); CENTRAL DRIVE-IN, Rochester, N. Y. (1946).

WALKER
(See SMITH and WALKER)

NORTH CAROLINA

GAINES, HENRY IRVEN
32 Wall Street, Asheville
Founded: 1925. Member: A.I.A. Contributed: Architectural Forum; Architectural Record. Theatres: CAPITOL, Laurens, S. C. (1949); GALAX, Highlands, N. C. (1949); PARAMOUNT, Asheville, N. C. (1948); STRAND, Waynesville, N. C. (1948); GALAX, Sylva, N. C. (1940); PLAZA, Asheville, N. C. (1940); PARK, Waynesville, N. C. (1939).

MARSH, M. R.
404 Chatham Building, Charlotte
Founded: 1922. Member: A.I.A.; North Carolina Chap., A.I.A. Theatres: CASH, Kings Mt., N. C. (1949); CHARLOTTE, Charlotte, N. C. (1949); POWELL, Chester, S. C. (1949); CENTER, Maiden, N. C. (1948); ELM, Greensboro, N. C. (1948); PLAZA, Charlotte, N. C. (1938); IMPERIAL, Charlotte, N. C. (1937); CAROLINA, Hickory, N. C. (1936); STATE, Charlotte, N. C. (1936); STATE, Columbia, S. C. (1936).

STILLWELL, ERLE G., Inc.
P. O. Box 1056, Hendersonville
Founded: 1915. Member: A.I.A. Theatres: AMBASSADOR, Raleigh, N. C.; BAILEY, Wilmington, N. C.; BROADWAY, Fayetteville, N. C.; CABARRUS, Concord, N. C.; Calhoun, Anniston, Ala.; CAMPUS, Tuscaloosa, Ala.; CAROLINA, Chapel Hill, N. C.; CAROLINA, Hendersonville, N. C.; CAROLINA, Lexington, N. C.; CAROLINA, Wilson, N. C.; CAROLINA, Columbia, S. C.; CENTER, Selma, Ala.; CENTER, Burlington, N. C.; CENTER, Charlotte, N. C.; CENTER, Durham, N. C.; CENTER, Greensboro, N. C.; CENTER, Hickory, N. C.; CENTER, High Point, N. C.; CENTER, Lenoir, N. C.; CENTER, Monroe, N. C.; CENTER, Raleigh, N. C.; CENTER, Rocky Mt., N. C.; CENTER, Columbia, S. C.; CENTER, Greenville, S. C.; CENTER, Greenwood, S. C.; CENTER, Chattanooga, Tenn.; CENTER, Kingsport,

Tenn.; CO-ED, Brevard, N. C.; COLONY, Fayetteville, N. C.; DARLINGTON, Darlington, S. C.; DIAMOND, Tuscaloosa, Ala.; DILWORTH, Charlotte, N. C.; FIVE POINTS, Columbia, S. C.; ISIS, West Asheville, N. C.; KNOX, Knoxville, Tenn.; PALMETTO, Anderson, S. C.; PALMETTO, Columbia, S. C.; PALMETTO, Spartanburg, S. C.; PARAMOUNT, Burlington, N. C.; PARK, Charlotte, N. C.; PARK, Knoxville, Tenn.; PARR, Lancaster, S. C.; PITTMAN, Fayetteville, N. C.; POINSETT, Greenville, S. C.; STATE, Hendersonville, N. C.; STATE, High Point, N. C.; STATE, Spartanburg, S. C.; STATE, Bluefield, W. Va.; SUMTER, Sumter, S. C.; TRYON, Tryon, N. C.; VARSITY, Raleigh, N. C.; WALKER, Jasper, Ala.; WASHBURN, Shelby, N. C.; WINSTON, Winston-Salem, N. C.; YOUNG, Clinton, S. C.

BENTON, CHARLES C. and SONS
120 N. Tarbon Street, Wilson
Founded: 1909. **Theatres:** DAVIS, Morganton, N. C. (1949); HOUSE, Marion, N. C. (1949); CENTER, Charlotte, N. C. (1948); GEM, Kannapolis, N. C. (1948); CLINTON, Clinton, N. C. (1942); GRAHAM, Graham, N. C. (1942); MIMOSA, Morganton, N. C. (1940); RIVIERA, Charleston, S. C. (1940); CAROLINA, Elizabeth City, N. C. (1926); PLAYHOUSE, Statesville, N. C. (1924).

OHIO

KONARSKI, M. M.
844 W. Market Street, Akron 3
Founded: 1920. **Member:** A.I.A. **Theatres:** RITZ, Akron, O. (1949).
(Also various school auditoriums in Akron, Ohio and Kanawha County (Charleston) W. Va.)

CARLTON, WILLIAM W. and ASSTS.
15 E. Eighth Street, Cincinnati 2
Associates: George F. Frankenberger, William H. Junker, Waldemar A. Lensky. **Founded:** 1936. **Member:** A.I.A.; Architects Society of Ohio; Allied Construction Industries; American Society of Civil Engineers; American Society of Mechanical Engineers. **Theatres:** EASTERN-MEDINA DRIVE-IN, Easton, Pa. (1949); TWIN DRIVE-IN, Cincinnati, O. (1949); TACOMA PARK DRIVE-IN, Dayton, Ky. (1948); MT. HOLLY DRIVE-IN, Mt. Holly, O. (1947).

GODLEY, GEORGE H.
918 E. Court Street, Cincinnati 2
Founded: 1914. **Member:** Architects Society of Ohio. **Theatres:** DELL, Delbarton, W. Va. (1949); MILFORD MOTOR-IN, Milford, O. (1949); FOREST AUTO, Forestville, O. (1948); STATE, Harrison, O. (1947); WEST HILLS, Cincinnati, O. (1941); MT. LOOKOUT, Cincinnati, O. (1940); ELMWOOD, Elmwood Place, O. (1935).

BARNES
(See SPAHN and BARNES)

BURROWS, GEORGE H. and ASSTS.
1621 Lee Road at Mayfield, Cleveland 18
Founded: 1923. **Theatres:** PAULDING, Paulding, O. (1948); PORT, Port Clinton, O. (1948); FAIRMOUNT, Cleveland, O. (1942); RIVERSIDE, Cleveland, O. (1938); TELENEWS, Cleveland, O. (1938); HIGHLAND, Akron, O. (1937); LAKE, Barberton, O. (1937); MEDINA, Medina, O. (1937); COMMADORE, Cleveland, O. (1936); SHAKER, Cleveland, O. (1935).

EBELING, GEORGE A.
234 Colonial Arcade, Cleveland
Founded: 1919. **Member:** A.I.A.; Ohio Society of Architects. **Theatres:** BARRY, Pittsburgh, Pa. (1949); MAPLETOWN, Maple Heights, O. (1949); MEMORIAL, East Palestine, O. (1949); STATE, Cuyahoga Falls, O. (1949); DALE, Dayton, O. (1948); PARK, Painesville, O. (1946); YORKTOWN, Cleveland, O. (1946); COLONY, Toledo, O. (1941); LAKE, Painesville, O. (1940); LEXINGTON, Cleveland, O. (1923).

SPAHN and BARNES
12429 Cedar Road, Cleveland Heights 6
Founded: 1946. **Member:** A.I.A. **Theatres:** SHREVE, Shreve, O. (1946).

TEARE
(See WEINBERG and TEARE)

WEINBERG and TEARE
1225 Schofield Building, Cleveland 15
Founded: 1920. **Member:** A.I.A.; Architects Society of Ohio. **Theatres:** RICHMOND, Lyndhurst, O. (Associate) (1948); VOGUE, Shaker Heights, O. (Associate) (1947); CENTER-MAYFIELD, Cleveland Heights, O. (1936); FALLS, Cuyahoga Falls, O. (1932); HALTNORTH, Cleveland, O. (1929); UNIVERSITY, Cleveland, O. (1928); ASTOR, Cleveland, O. (1928); PLAZA, Cleveland, O. (1926).

F and Y BUILDING SERVICE, Inc.
319 E. Town Street, Columbus
Member: A.I.A.; Ohio Society of Architects. **Contributed:** Physical Theatre Section of EXHIBITOR; THEATRE CATALOG—1941, 1942, 1945, 1947-48, 1948-49. **Theatres:** ARLINGTON, Indianapolis, Ind. (1949); MARY ANDERSON, Louisville, Ky. (1949); VALLEY AND SHOPPING CENTER, Cincinnati, O. (1949); LANE AND SHOPPING CENTER, Columbus, O. (1948); OLD TRAIL, Columbus, O. (1948); DABEL, Dayton, O. (1947); ESQUIRE, Columbus, O. (1947); UNIVERSITY, Columbus, O. (1947); COVEDALE, Cincinnati, O. (1946).

BEATTY, ROBERT F.
Potters Savings & Loan Building
East Liverpool
Founded: 1935. **Member:** A.I.A.; Ohio Society of Architects; National Council of Architectural Registration Boards. **Contributed:** THEATRE CATALOG—1948-49. **Theatres:** BELLE AIR DRIVE-IN, Weirton, W. Va. (1949); FAMILY DRIVE-IN, New Kensington, Pa. (1948); FAMILY DRIVE-IN, Steubenville, O. (1948); SKY HI DRIVE-IN, Franklin, Pa. (1948); AMERICAN, East Liverpool, O. (1947); CEROMIC, East Liverpool, O. (1946); SKY VIEW DRIVE-IN, East Liverpool, O. (1946).

HUNTER
(See ZELLER and HUNTER)

ZELLER and HUNTER
17½ South Center Street, Springfield 8
Founded: 1929. **Member:** A.I.A.; Architects Society of Ohio. **Theatres:** FAIRBORN, Fairfield, O. (1948).

CLARKE, FRED H.
1002 National Exchange Bank Building,
Steubenville
Founded: 1912. **Member:** Architects Society of Ohio. **Theatres:** ANAR, Weirton, W. Va. (1940); CARROLLTON, Carrollton, O. (1940); REX, Steubenville, O. (1939).

KEICH and O'BRIEN
912 Union Savings & Trust Bldg., Warren
Founded: 1916. **Member:** East Ohio Chap., A.I.A.; Ohio Society of Architects. **Theatres:** DANIEL, Warren, O. (1940); LOOK, Warren, O. (1916).
(Also many auditoriums with school plans.)

O'BRIEN
(See KEICH and O'BRIEN)

OKLAHOMA

ADERHOLD
(See PARR and ADERHOLD)

HILL
(See SOREY, HILL and SOREY)

PARR and ADERHOLD
1021 Hales Building, Oklahoma City 2
Founded: 1940. **Member:** A.I.A.; American Society of Heating & Ventilating Engineers. **Theatres:** SOONER, Oklahoma City, Okla. (1948); TELEVISION STUDIO WKY-TV, Oklahoma City, Okla. (1948); YALE, Oklahoma City, Okla. (1945); WARNER, Oklahoma City, Okla. (1944); MUNICIPAL AUDITORIUM, Oklahoma City, Okla. (1943).

SOREY, HILL and SOREY
809 N. W. 36th Street, Oklahoma City 3
Founded: 1930. **Member:** A.I.A. **Theatres:** AMERICAN, Guymon, Okla. (1947); NORTHWEST DRIVE-IN, Oklahoma City, Okla. (1947); WALDRON, Lindsey, Okla. (1946); KNOB HILL, Oklahoma City, Okla. (1943); MAYFLOWER, Oklahoma City, Okla. (1937).

PARKER CONSTRUCTION CO.
115 S. Philadelphia Street, Shawnee
Theatres: LA VISTA, Pampa, Tex. (1949); WESTLAND, Elk City, Okla. (1949); OASIS, Kermit, Tex. (1947); LYRIC, Bartlesville, Okla. (1946); CHIEF, Enid, Okla. (1939).

OREGON

BARNES
(See HERZOG and BARNES)

DE YOUNG, J. W.
730 S. W. Salmon Street, Portland
Member: A.I.A., Oregon Chap. **Theatres:** MOYER, Gresham, Ore. (1949); ACADEMY, Portland, Ore. (1948); McKENZIE, Springfield, Ore. (1947); TOWER, Richfield, Wash. (1947); REX, Nampa, Idaho (1946); WEST SALEM, West Salem, Ore. (1946); PARK ROSE, Portland, Ore. (1945); SANDY, Sandy, Ore. (1945); SUTHERLIN, Sutherlin, Ore. (1945); VENETIAN, Albany, Ore. (1945).

HERZOG and BARNES
407 Henry Building, Portland 4
Founded: 1920. **Member:** A.I.A.; Oregon Chap., A.I.A. **Theatres:** TOWER, Bend, Ore. (1940); UNITED ARTISTS, Pendleton, Ore. (1938); MUSIC BOX, Portland, Ore. (1928); HOLLYWOOD, Portland, Ore. (1926); UNITED ARTISTS, Portland, Ore. (1926); LIBERTY, Astoria, Ore. (1924).

JOHNSTON, HOLLIS
2088 W. Stark Street, Portland
Member: A.I.A. **Theatres:** GILCHRIST, Gilchrist, Ore. (1940); BONNEVILLE, Bonneville, Ore. (1935).

THOMAS, LEE A.
519 Equitable Building, Portland
Founded: 1912. **Member:** A.I.A. **Theatres:** PARK, Lebanon, Ore. (1949); BAKER, Baker, Ore. (1948); CENTURY, Portland, Ore. (1948); BINGEN, Bingen, Wash. (1947); 21ST AVENUE, Portland, Ore. (1947); AMPHITHEATRE DRIVE-IN, Portland, Ore. (1946); NAMPA, Nampa, Idaho (1946); RIALTO, Hood River, Ore. (1946); ICE ARENA, Port-

land, Ore. (1944); MILWAUKIE, Milwaukie, Ore. (1941); CREST, Portland, Ore. (1938); ROSEWAY, Portland, Ore. (1937); ST. JOHNS, Portland, Ore. (1935); MT. TABOR, Portland, Ore. (1933); YAKIMA, Yakima, Wash. (1931); CAPITOL, Portland, Ore. (1928); BAGDAD, Portland, Ore. (1927); ORIENTAL, Portland, Ore. (1927); LINCOLN, Portland, Ore. (1926); BOB WHITE, Portland, Ore. (1925); EGYPTIAN, Coos Bay, Ore. (1925); McDONALD, Eugene, Ore. (1925).

PENNSYLVANIA

EHRHART, GEORGE G.
233 Frederick Street, Hanover
Founded: 1946. **Member:** Pennsylvania Society of Professional Engineers; National Society of Professional Engineers. **Theatres:** CROSS KEYS DRIVE-IN, Hanover, Pa. (under constr.).

LONG
(See STARR and LONG)

STARR and LONG
410 N. 2nd Street, Harrisburg
Founded: 1920. **Member.** A.I.A. **Theatres:** UPTOWN, Harrisburg, Pa. (1949); TOWNE, Littlestown, Pa. (1947).

CHAPMAN, FLOYD A.
Lake Ariel
Founded: 1924. **Theatres:** CIRCULE DRIVE-IN, Simpson, Pa. (1949); RED BARN, Cortez, Pa. (1949); WHITE BEAUTY DRIVE-IN, Greentown, Pa. (1949).

CARROLL, ARMAND and WILLIAM J. STEPHENSON
262 S. 15th Street, Philadelphia 2
Founded: 1934. **Member:** A.I.A.; Pennsylvania Society of Architects. **Contributed:** Progressive Architecture; Architectural Record; Physical Theatre Section of EXHIBITOR; THEATRE CATALOG—1938, 1940, 1942. **Theatres:** MERBEN, Philadelphia, Pa. (1949); EDGEMOOR, Wilmington, Del. (1941); CENTER, Baltimore, Md. (1939); EMBASSY, Atlantic City, N. J. (1939); NEW, Baltimore, Md. (1939); MARGATE, Margate, N. J. (1938); STRAND, Ocean City, N. J. (1938); DANTE, Philadelphia, Pa. (1937); VENTNOR, Ventnor, N. J. (1937); ALDEN, Philadelphia, Pa. (1936).

FEDELI
(See MICHAELSON and FEDELI)

LEE, W. H.
732 Commercial Trust Building,
16 S. Broad Street, Philadelphia 2
Founded: 1915. **Member:** A.I.A.—Local and National; Pennsylvania Society of Architects. **Contributed:** Physical Theatre Section of EXHIBITOR; THEATRE CATALOG—1938, 1945, 1946-47, 1947-48. **Theatres:** ARLO, Camden, N. J. (1949); BOULEVARD DRIVE-IN, Allentown, Pa. (1949); CITY LINE CENTER, Philadelphia, Pa. (1949); WESTMONT, Camden, N. J. (1949); MIRACLE, Coral Gables, Fla. (1948); STRAND, Wildwood, N. J. (1948); GREEN HILL, Philadelphia, Pa. (1947); REGENT, Wildwood, N. J. (1947); ASTOR, Reading, Pa. (1941); MODEL, Philadelphia, Pa. (1941); QUEEN, Wilmington, Del. (1941); STRAND, Reading, Pa. (1941); AUDITORIUM, Coatesville, Pa. (1940); WISHART, Philadelphia, Pa. (1940); CASINO, Wildwood, N. J. (1939); RIALTO, Wilmington, Del. (1939); WEST SHORE, New Cumberland, Pa. (1939); ACE, Philadelphia, Pa. (1938); MAC, Chester, Pa. (1938); SENATE, Harrisburg, Pa. (1938); HILL, Paulsboro, N. J. (1937); LAWNDALE, Philadelphia, Pa. (1937); NEWS, Philadelphia, Pa. (1937); RIO, Camden, N. J. (1937); RIO, Harrisburg, Pa. (1937); SAVOY, Philadelphia, Pa. (1937); SUBURBAN, Ardmore, Pa. (1937); LANDIS, Vineland, N. J. (1936); SAVAR, Camden, N. J. (1935); BIJOU, Richmond, Va. (1933); LANGLEY, Hampton, Va. (1932); EMBASSY, Reading, Pa. (1930); ERLEN, Philadelphia, Pa. (1930); NORRIS, Norristown, Pa. (1929); HOLME, Holmesburg, Pa. (1928); RITZ, Ashland, Pa. (1928); DRAKE, Oil City, Pa. (1927); EMBASSY, Easton, Pa. (1927); FORUM, Philadelphia, Pa. (1927); LINDY, Philadelphia, Pa. (1927); PARKER, Darby, Pa. (1927); SEDGWICK, Philadelphia, Pa. (1927); VICTORIA, Mahonoy City, Pa. (1927); WAYNE, Wayne, Pa. (1927); LANSDOWNE, Lansdowne, Pa. (1926); PARK, Philadelphia, Pa. (1926); VICTORIA, Mt. Carmel, Pa. (1926); PARK, Reading, Pa. (1925); SEVILLE, Bryn Mawr, Pa. (1925); VICTORIA, Shamokin, Pa. (1925); CAPITOL, Lancaster, Pa. (1924); STATE, Easton, Pa. (1924); WALNUT STREET, Philadelphia, Pa. (1921); COLONIAL, Reading, Pa. (1920). *(And a total of over 200 in all.)*

MAGAZINER, LOUIS
1701 Walnut Street, Philadelphia 3
Founded: 1910. **Member:** A.I.A.; Pennsylvania Society of Architects. **Contributed:** Physical Theatre Section of EXHIBITOR. **Theatres:** MIDWAY, Philadelphia, Pa. (1932); SWARTHMORE PLAYHOUSE, Swarthmore, Pa. (1932); EMPRESS, Philadelphia, Pa. (1930); ARCADIA, Philadelphia, Pa. (1929); HAMMONTON, Hammonton, N. J. (1928); UPTOWN, Philadelphia, Pa. (1928); HUNT, Philadelphia, Pa. (1927); MEDIA, Media, Pa. (1927); OGONTZ, Philadelphia, Pa. (1926); FELTON, Philadelphia, Pa. (1925); PITMAN, Pitman, N. J. (1925); GLOBE, Atlantic City, N. J. (1913).

MICHAELSON and FEDELI
Fox Theatre Building, Philadelphia 3
Founded: 1937. **Member:** A.I.A.; Pennsylvania Society of Professional Engineers. **Theatres:** 611, Doylestown, Pa. (1949).

STEPHENSON
(See ARMAND CARROLL and WILLIAM J. STEPHENSON)

THALHEIMER and WEITZ
1315 Walnut Street, Philadelphia
Founded: 1924. **Member:** A.I.A.; Beaux-Arts Institute of New York; Pennsylvania State Assn. of Architects. **Contributed:** Architectural Forum; Architectural Record; Progressive Architecture; Physical Theatre Section of EXHIBITOR; THEATRE CATALOG—1938, 1940, 1945, 1946-47. **Theatres:** DEVON, Philadelphia, Pa. (1947); BROADWAY, Philadelphia, Pa. (1940); CHELTEN, Philadelphia, Pa. (1940); STONEHURST, Philadelphia, Pa. (1940), and over 100 other new and altered theatres.

WEITZ
(See THALHEIMER and WEITZ)

PELLEGRINI, CASIMIR J.
201 S. Craig Street, Pittsburgh 13
Founded: 1925. **Member:** A.I.A.; Pittsburgh Architects Club. **Theatres:** McBRIDE, Trafford, Pa. (1948).
(Also several auditoriums in conjunction with school buildings.)

RIGAUMONT, VICTOR A.
5471 Coral Street, Pittsburgh 6
Founded: 1916. **Member:** Pennsylvania Society of Architects; Registered Architect in Pa., N. Y., N. J., Ohio, W. Va., Fla., Md., and Va. **Contributed:** Architectural Record; Physical Theatre Section of EXHIBITOR; THEATRE CATALOG—1940, 1942, 1946-47, 1948-49. **Theatres:** HOLLYWOOD, Dormont, Pa. (1948); MANOS, Monessen, Pa. (1948); STRAND, Erie, Pa. (1948); FAIRMONT, Fairmont, W. Va. (1946); JORDAN, Greenville, Pa. (1946); KAYTON, Franklin, Pa. (1946); ARSENAL, Pittsburgh, Pa. (1941); MANOS, Uniontown, Pa. (1941); WHITEHALL, Brentwood, Pa. (1940); HARRIS-MANOS, Jeannette, Pa. (1939); OAKS, Oakmont, Pa. (1939); PENN, Titusville, Pa. (1939); HARRIS-DENIS, Mt. Lebanon, Pa. (1938); PARK, Mansfield, O. (1938); SMALLEY, Norwich, N. Y. (1933); MELROSE, Pittsburgh, Pa. (1931); SCHINE, Cortland, N. Y. (1929); STATE, Ithaca, N. Y. (1928); STAHL, Homestead, Pa. (1926); CAPITOL, Braddock, Pa. (1922).

STOTZ, CHARLES M. and EDWARD
801 Bessemer Building, Pittsburgh 22
Founded: 1936. **Member:** Pittsburgh Chapter, A.I.A.; Pittsburgh Architectural Club; Pennsylvania Professional Engineers. **Theatres:** COLONY, Marietta, O. (1949); FULTON, Pittsburgh, Pa. (1949); McKEAN, Bradford, Pa. (1949); SHEA, Geneva, O. (1948).

MOSKOWITZ, SAMUEL ZOURI
67-69 Public Square, Wilkes-Barre
Founded: 1930. **Member:** A.I.A.; N. E. Pa. Chapter, A.I.A.; Pennsylvania Society of Architects. **Theatres:** PLAINS, Plains, Pa. (1940).

RHODE ISLAND

ORTOLEVA and ASSTS.
607 Jackson Building, Providence
Founded: 1940. **Member:** American Society of Civil Engineers. **Theatres:** LE ROY, Pawtucket, R. I. (1949).

SOUTH DAKOTA

SPITZNAGEL, HAROLD
816 National Bank of South Dakota Building, Sioux Falls
Associate: John A. Schoening, R. A. Associate. **Founded:** 1930. **Member:** A.I.A., Minnesota Chapter; South Dakota Society of Engineers and Architects. **Contributed:** Architectural Forum; Architectural Record; Progressive Architecture; Nuestra Architectura; THEATRE CATALOG—1941. **Theatres:** AUGUSTANA, Sioux Falls, S. Dak. (1947); STATE, Pierre, S. Dak. (1942); HOLLYWOOD, Sioux Falls, S. Dak. (1938).

TENNESSEE

CHURCHILL, B. F. and SONS
Maryville
Founded: 1919. **Contributed:** THEATRE CATALOG—1945. **Theatres:** MARY ANDERSON, Hodgenville, Ky. (1949); GADSDEN, Gadsden, Ala. (1947); AMUSE-U, Kosciusko, Miss. (1946); ALHAMBRA, Hopkinsville, Ky. (1945); CAPITOL, Dyersburg, Tenn. (1942) FRANCIS, Dyersburg, Tenn. (1942); ARCO, Bardstown, Ky. (1941); MAGIC, Barbourville, Ky. (1941); RITZ, Rockwood, Tenn. (1941); VIV, Corbin, Ky. (1940); MITCHELL, Barbourville, Ky. (1938); IOLA, Iola, Kansas (1929).

SPENCER, RAYMOND B. and ASSTS.
First National Bank Building, Memphis 3
Associates: John R. Sanford, Architect, Robert W. Wiggins, Jr., Associate. **Founded:** 1912. **Contributed:** THEATRE

CATALOG—1947-48. Theatres: BRY, Selmer, Tenn.; ELLIS, Cleveland, Miss.; GOOCH, Selmer, Tenn.; W. C. HANDY, Memphis, Tenn.; HOLLYWOOD, Memphis, Tenn.; IDLEWILD, Memphis, Tenn.; JOY, Memphis, Tenn.; NEW DAISY, Memphis, Tenn.; NORMAL, Memphis, Tenn.; PRINCESS, Memphis, Tenn.; RITZ, Lexington, Tenn.; SAVOY, Memphis, Tenn.; STRAND, Memphis, Tenn.; WILLIAMS, Oxford, Miss.

WOODS, EVERETT D.
803 Eighty-one Madison Bldg., Memphis
Founded: 1930. Member: A.I.A.; State Board of Architectural and Engineering Examiners. Theatres: PLAZA, Memphis, Tenn. (1949); EAST HIGH SCHOOL AUDITORIUM, Memphis, Tenn. (1947).

HOLMAN
(See MARR and HOLMAN)

MARR and HOLMAN
702 Stahlman Building, Nashville
Founded: 1912. Member: Tenn. Chapter, A.I.A. Contributed: Architectural Forum; Architectural Record; Progressive Architecture; THEATRE CATALOG—1948-49. Theatres: PRINCESS, Shelbyville, Tenn. (1949); RITZ, Alabama City, Ala. (1949); ROANE, Rockwood, Tenn. (1949); SHOALS, Florence, Ala. (1949); STATE, Bowling Green, Ky. (1949); CRESCENT DRIVE-IN, Nashville, Tenn. (1948); PRINCESS, Murfreesboro, Tenn. (1945); COLBERT, Sheffield, Ala. (1942); MELROSE, Nashville, Tenn. (1942); BELLE MEADE, Nashville, Tenn. (1940).

TEXAS

LEVY, MORRIS L.
509 Medical Professional Building, Corpus Christi
Founded: 1921. Theatres: CORPUS DRIVE-IN, Corpus Christi, Tex. (1947); EL PASO DRIVE-IN, El Paso, Tex. (1946); MISSION DRIVE-IN, San Antonio, Tex. (1946); WACO DRIVE-IN, Waco, Tex. (1946); ALAMO DRIVE-IN, San Antonio, Tex. (1945); BEACH, Corpus Christi, Tex. (1939); HARLEM, Corpus Christi, Tex. (1938).

BROAD and NELSON
618 Reserve Loan Life Building, Dallas 1
Founded: 1923. Member: A.I.A.; Texas Society of Professional Engineers; Texas Society of Architects. Theatres: PRESTON, Dallas, Tex. (under constr.).

CORGAN, JACK
2008 Jackson, Dallas
Founded: 1938. Member: A.I.A.; Texas Society of Architects. Contributed: THEATRE CATALOG—1942, 1947-48. Theatres: HILAND, Albuquerque, N. Mex. (1949); TEXAS, Kingsville, Tex. (1949); LEACHMAN, Stillwater, Okla. (1948); MORLEY, Borger, Tex. (1948); HORNBECK, Shawnee, Okla. (1947); WILL ROGERS, Oklahoma City, Okla. (1946); TELENEWS, Dallas, Tex. (1941); ARKANSAS, Little Rock, Ark. (1940); CENTRE, Corpus Christi, Tex. (1940); EL RANCHO, Victoria, Tex. (1938).
(Also about 300 others.)

NELSON
(See BROAD and NELSON)

SMITH, RAYMOND F.
2009½ Jackson Street, Dallas
Founded: 1937. Member: A.I.A.; Texas Society of Registered Architects. Contributed: Architectural Record; THEATRE CATALOG—1947-48, 1948-49. Theatres: ABALON, New Orleans, La. (1949); CAPITAN, Houston, Tex. (1949); STATE, Idabel, Okla. (1948); VALLEY, El Paso, Tex. (1948); DELMAN, Dallas, Tex. (1947); GRANADA, Dallas, Tex. (1946); CASA LINDA, Dallas, Tex. (1945); ALAMEDA, Houston, Tex. (1941); GATEWAY, Ft. Worth, Tex. (1940); ROSEWIN, Dallas, Tex. (1938).
(And scores of others.)

CARROLL and DAEUBLE
1001 East Yandell Boulevard, El Paso
Founded: 1945. Member: A.I.A. Contributed: School Board Journal. Theatres: LIBERTY HALL, El Paso, Tex. (1949); MESITA SCHOOL AUDITORIUM, El Paso, Tex. (1948).

DAEUBLE
(See CARROLL and DAEUBLE)

SHULT, ERNEST L.
5009 Fannin Street, Houston 4
Founded: 1932. Member: A.I.A.; Texas Society of Architects; Registered Architect, State of Texas. Theatres: PALM, Sugarland, Tex. (1949); LEON, Pleasanton, Tex. (1948); COLE, Richmond, Tex. (1947); PALACIOS, Palacios, Tex. (1942); SHOWBOAT, Freeport, Tex. (1942); PLAZA, Wharton, Tex. (1941); SHOWBOAT, Texas City, Tex. (1941); GANADO, Ganado, Tex. (1940); CLEVELAND, Cleveland, Tex. (1938); FLOYDS, El Campo, Tex. (1938); LAVACA, Port Lavaca, Tex. (1938); COLE, Rosenberg, Tex. (1937); TEXAS, Texas City, Tex. (1937); WEST COLUMBIA, West Columbia, Tex. (1937); VON MINDEN, Schulenberg, Tex. (1927); NORMANA, El Campo, Tex. (1925).

ALLEN, HARVEY C. and HOWARD C.
Box 495, Lamesa
Founded: 1920. Theatres: CRANE, Crane, Tex. (1949); PALACE, Lamesa, Tex. (1949); REX, O'Donnell, Tex. (1949); WALLACE, Levelland, Tex. (1949); MAJESTIC, Lamesa, Tex. (1948); YUCCA, Lamesa, Tex. (1948); LLANOS, Lubbock, Tex. (1942); RHEA, Denver City, Tex. (1941); TOWER, Lamesa, Tex. (1941); TOWER, Seminole, Tex. (1940); WALLACE, Andrews, Tex. (1940); WALLACE, Seagraves, Tex. (1940); FALLS, Grand Falls, Tex. (1939); ROSE, Levelland, Tex. (1938); WALLACE, Sundown, Tex. (1937); PALACE, Seminole, Tex. (1935); ROSE, Tahoka, Tex. (1930).

MADDUX, D. C.
1004 S. Oakes, San Angelo
Founded: 1937. Member: A.I.A.; Texas Society of Architects. Theatres: ROGUE, Eden, Tex. (1944); LYRIC, San Angelo, Tex. (1943).

CARVEL, FROST
703 Travis Building, San Antonio
Founded: 1930. Contributed: THEATRE CATALOG—1948-49. Theatres: SAN PEDRO DRIVE-IN, San Antonio, Tex. (1947).

MARRIOTT, J. M.
950 Frost Bank Building, San Antonio
Associate: Wallas J. Wade, Arch. Founded: 1905. Member: A.I.A.; Texas Society of Architects. Theatres: ALMOS, San Antonio, Tex. (1949); TOWER, San Antonio, Tex. (1941); JOY, San Antonio, Tex. (1940).

PITTS, DeHAVEN
214 Travis Building, San Antonio
Founded: 1929. Member: A.I.A.; Texas Society of Architects. Contributed: THEATRE CATALOG—1946-47. Theatres: TOWER, Luling, Tex. (1948); ALAMEDA, Crystal City, Tex. (1947); HI-HO, San Antonio, Tex. (1947); IT, Mathis, Tex. (1946).

SMITH, GORDON M.
255 Primera Drive, San Antonio
Founded: 1927. Member: A.I.A.; I.S.A.; A.M.E. Theatres: KING DRIVE-IN, San Marcos, Tex. (1949); DRIVE-IN, Alice, Tex. (1947); IT, Mathis, Tex. (1946).

SMITH, DON W.
Texas Bank Building, Sweetwater
Founded: 1935. Member: Texas Society of Architects. Theatres: RITZ, Snyder, Tex. (1949); JOY, Roscoe, Tex. (1947).

UTAH

MARKHAM, FRED L.
45 N. University Avenue, Provo
Associate: W. Rowe Smith, Designer. Founded: 1931. Member: A.I.A., Chapter of Utah. Theatres: ANGELUS, Spanish Fork, Utah (1949); ARCH, Spanish Fork, Utah (1949); HUISH, Payson, Utah (1948); AVON, Heber City, Utah (1947); HUISH, Richfield, Utah (1946); SCERA, Orem, Utah (1941); PRICE, Price, Utah (1938); STAR, Payson, Utah (1937).

EVANS, PAUL K.
315 Wasatch Oil Building, Salt Lake City
Founded: 1937. Member: Utah Chapter, A.I.A. Contributed: THEATRE CATALOG—1942. Theatres: QUEEN, Woods Cross, Utah (1949); RICHY, Salt Lake City, Utah (1949); WEST, Rock Springs, Wyo. (1949); BOUNTIFUL MOTOR VU, Bountiful, Utah (1948); CENTRE, Ontario, Ore. (1948); CENTRE, Sidney, Mont. (1947); MAIN, Garland, Utah (1947); VISTA, Boise, Idaho (1946); BOUNTIFUL, Bountiful, Utah (1941); CENTRAL, Ely, Nev. (1940).
(And about 45 others in Western States.)

FETZER and FETZER
415 Templeton Building, Salt Lake City
Founded: 1909. Member: A.I.A. Theatres: BURK, Midvale, Utah (1949); BICKNELL, Bicknell, Utah (1945); HARLO, Harlowton, Mont. (1945); ADMIRAL, Clearfield, Utah (1944).

WINBURN, SLACK W.
618 Beason Building, Salt Lake City
Founded: 1920. Member: A.I.A. Theatres: ARCADE, Salt Lake City, Utah (1948); ASHTON, Ashton, Idaho (1948); MORGAN, Morgan, Utah (1948); GOODING, Gooding, Utah (1947); ORPHEUM, Twin Falls, Idaho (1940); SMITHFIELD Smithfield, Utah (1937).

VIRGINIA

PARLI, RICHARD L.
1008 N. Highland Street, Arlington
Founded: 1947. Member: A.I.A. Theatres: VIERS, Viers Mill Village, Montgomery County, Md. (1949).

CLARK, PENDLETON S.
612 Krise Building, Lynchburg
Founded: 1921. Member: A.I.A.; Virginia Chapter, A.I.A. Contributed: Architectural Forum; The School Executive. Theatres: Ft. Early, Lynchburg, Va. (1948).

BUDINA, A. O.
1013-A E. Main Street, Richmond 6
Member: A.I.A. Contributed: THEATRE CATALOG—1938, 1940, 1942, 1946-47. Theatres: CAMEO, Bristow, Va. (1948); PALACE, Petersburg, Va. (1947); REX, Petersburg, Va. (1946); CENTER, Alexandria, Va. (Associate) (1944); GLEBE, Arlington, Va. (Associate) (1944); BLUEBIRD, Petersburg, Va. (1940); CENTURY, Petersburg, Va. (1940); HALIFAX, So. Boston, Va. (1940); ASHTON, Arlington, Va. (1939); STATE, Farmville, Va. (1939); BELLEVUE,

Richmond, Va. (1938); PULASKI, Pulaski, Va. (1938); WESTHAMPTON, Richmond, Va. (1938); STATE, Falls Church, Va. (1937); PRINCESS, So. Boston, Va. (1936); STATE, Richmond, Va. (1936).

SINNOTT, EDWARD F.
112-A E. Cary Street, Richmond 19
Founded: 1925. Member: A.I.A. Contributed: Portland Cement Assn. Publication; THEATRE CATALOG—1938. Theatres: CAROLINE, Bowling Green, Va. (1949); PAGE, Luray, Va. (1939); HENRICO, Highland Springs, Va. (1938); BROOKLAND, Richmond, Va. (1937); MAGGIE WALKER, Richmond, Va. (1937); ROBINSON, Richmond, Va. (1937); DAW, Tappahannock, Va. (1936); REX, Petersburg, Va. (1936).

BOYNTON
(See SMITHEY and BOYNTON)

SMITHEY and BOYNTON
112 W. Kirk Avenue, Roanoke
Founded: 1922. Member: A.I.A. Theatres: LYRIC, Blacksburg, Va. (1930); SALEM, Salem, Va. (1930); AMERICAN, Roanoke, Va. (1928).

WASHINGTON

CARLSON, ELEY and GREVSTAD
325 Second and Cherry Bldg., Seattle 4
Founded: 1938. Member: A.I.A. Theatres: LIBERTY, Prosser, Wash. (under constr.); ORPHEUM, Kodiak, Alaska (1949); RENTON, Renton, Wash. (1949); ROXY, Renton, Wash. (1949); LIBERTY, Seattle, Wash. (1948); PREVIEW, Seattle, Wash. (1948); TEMPLE, Tacoma, Wash. (1948); PRINCESS, Prosser, Wash. (1947); FOX, Omak, Wash. (1946); VALE, Kent, Wash. (1946).

ELEY
(See CARLSON, ELEY and GREVSTAD)

GREVSTAD
(See CARLSON, ELEY and GREVSTAD)

HILBORN, DAY W.
307 E. 10th Street, Vancouver
Founded: 1925. Member: A.I.A.; Licensed in Oregon and Washington. Contributed: The Nations Schools; Pencil Points: Arts and Architecture. Theatres: HERMISTON, Hermiston, Ore. (1947); ODEM, Redmond, Ore. (1947); BROADWAY, Vancouver, Wash. (1946); KELSO, Kelso, Wash. (1939); LIBERTY, Condon, Ore. (1939); VISION, Longview, Wash. (1939); IRVINGTON, Portland, Ore. (1938); LILONG, Oregon City, Ore. (1938); NEW SELLWOOD, Portland, Ore. (1938); AVELON, Clatskanie, Ore. (1937); CAMEO, Newburg, Ore. (1937); COLUMBIA, Longview, Wash. (1936); KIGGINS, Vancouver, Wash. (1935).

GESSEL, H. BRANDT and ASSTS.
14 E. Main Street, Walla Walla
Associate: Stanley G. Page, Designer. Founded: 1941. Member: Spokane Chap., A.I.A. Contributed: Architectural Record. Theatres: NEW RICHLAND, Richland, Wash. (1949); LIBERTY, Walla Walla, Wash. (1947); ROXY, Walla Walla, Wash. (1947).

WEST VIRGINIA

KYLE, HERBERT S.
Suite 1107, Union Trust Building, Charleston 1
Founded: 1904. Member: W. Va. Chapter, A.I.A. Theatres:
(Little theatre work in recent years but a general architectural office doing 75 to 80% school work including auditoria.)

WISCONSIN

LE VEE, RAYMOND N. and ASSTS.
Appleton
Founded: 1931. Member: A.I.A.; State Assn. of Wisconsin Architects. Contributed: Architectural Record; Architectural Forum. Theatres: CAMP, Tomah, Wis. (1947); OAK RIDGE, Oak Ridge, Tenn. (1944).

LAW, LAW, POTTER and NYSTROM
121 S. Pinckney Street, Madison 3
Associate: J. J. Simandl. Founded: 1914. Member: A.I.A.; Wisconsin Chapter, A.I.A.; Amer. Society of Heating and Ventilating Engrs.; Illuminating Engineering Society; American Concrete Institute. Contributed: School Board Journal: Nations Schools. Theatres: HIGH SCHOOL AUDITORIUM, Beloit, Wis. (1949); HIGH SCHOOL AUDITORIUM, Madison, Wis. (1930); MUNICIPAL BUILDING, Platteville, Wis. (1929); MASONIC TEMPLE, Freeport, Ill. (1928); MASONIC TEMPLE, Madison, Wis. (1924).

NYSTROM
(See LAW, LAW, POTTER and NYSTROM)

POTTER
(See LAW, LAW, POTTER and NYSTROM)

SCHOEPKE, DONALD M.
1916½ Hall Avenue, Marinette
Founded: 1941. Member: State Assn. of Wisconsin Architects. Theatres: OCONTO, Oconto, Wis. (1947).

BELONGIA, MYLES E.
611 N. Broadway, Milwaukee 2
Founded: 1925. Member: State Assn. of Wisconsin Architects. Contributed: THEATRE CATALOG—1948-49. Theatres: GRAFTON, Grafton, Wis. (1949); LODI, Lodi, Wis. (1949); OUR, Niagara, Wis. (1949); SHULLSBURG, Shullsburg, Wis. (1949); TWO RIVERS, Two Rivers, Wis. (1949); AIRWAY, Milwaukee, Wis. (1948); MIDDLETON, Middleton, Wis. (1946); REGENT, Prairie du Chien, Wis. (1944); RIVOLI, Two Rivers, Wis. (1940); VARSITY, Appleton, Wis. (1940).

EBLING, PLUNKETT and KEYMAR
1220 N. Milwaukee Street, Milwaukee 2
Associate: Leo A. Kelly. Founded: 1933. Member: A.I.A. Theatres: SHOREWOOD, Shorewood, Wis. (1927).

KEYMAR
(See EBLING, PLUNKETT and KEYMAR)

PLUNKETT
(See EBLING, PLUNKETT and KEYMAR)

OBEL, IRVING A.
610½ Third Street, Wausau
Founded: 1919. Member: State Assn. Wisconsin Architects. Theatres: GRAND, Wausau, Wis.; HOLLYWOOD, Wausau, Wis.; HOME, Antigo, Wis.; KEEF, Mosinee, Wis.; MALLOW, Wabeno, Wis.; ORPHEUM, Green Bay, Wis.; RAY CLEMENS, Neilsville, Wis.; ROBAYE, Merrill, Wis.; ROOMAN, Rhinelander, Wis.; WAUSAU, Wausau, Wis.

WYOMING

BRADLEY
(See PORTER and BRADLEY)

PORTER and BRADLEY
1009 Lincolnway, Cheyenne
Founded: 1922. Member: A.I.A.; Licensed to practice in Colorado, Nebraska, and Wyoming. Theatres: LINCOLN, Cheyenne, Wyo.; LITTLE, Laramie, Wyo.; PRINCESS, Cheyenne, Wyo.; UNIVERSITY OF WYOMING AUDITORIUM, Laramie, Wyo.; WYOMING CONSISTORY AUDITORIUM, Cheyenne, Wyo.
(Also numerous school stages.)

Canada

BRITISH COLUMBIA

SIMMONDS, H. H.
1909 W. Broadway, Vancouver
Founded: 1919. Member: Architectural Institute of British Columbia; Royal Architectural Institute of Canada. Contributed: THEATRE CATALOG—1948-49. Theatres: FRASER, Vancouver, B. C. (1949); KEREMOES, Keremoes, B. C. (1948); LADNER, Ladner, B. C. (1948); MOODY, Port Moody, B. C. (1948); STUDIO, Vancouver, B. C. (1948); OLIVER, Oliver, B. C. (1947); AGASIZZ, Agasizz, B. C. (1946); CLOVA, Cloverdale, B. C. (1946); ODEON, Victoria, B. C. (1946); HOPE, Hope, B. C. (1945); CIRCLE, Vancouver, B. C. (1941); METRO, New Westminster, B. C. (1938); NOVA, North Vancouver, B. C. (1938); CAMBIE, Vancouver, B. C. (1937); ALBERNI, Alberni, B. C. (1936); MARPOLE, Marpole, B. C. (1933); STANLEY, Vancouver, B. C. (1932); PATRICIA, Powell River, B. C. (1927); OLYMPIA, Vancouver, B. C. (1926); GRANDVIEW, Vancouver, B. C. (1921).

MANITOBA

GREEN BLANKSTEIN RUSSELL and ASSTS.
310 Time Building, Winnipeg
Founded: 1931. Member: Manitoba Assn. of Architects; Ontario Assn. of Architects; Saskatchewan Assn. of Architects; Alberta Assn. of Architects. Theatres: CAPITOL, North Battleford, Saskatchewan (1949); CAPITOL, Regina, Saskatchewan (1949); CAPITOL, Winnipeg, Manitoba (1949); GARRICK, Winnipeg, Manitoba (1949); GRAND, Regina, Saskatchewan (1949); METROPOLITAN, Regina, Saskatchewan (1949); PARAMOUNT, Lethbridge, Alberta (under constr.); GAIETY, Winnipeg, Manitoba (1948); ODEON, Winnipeg, Manitoba (1946).

ONTARIO

KEMP, LESLIE H.
37 Dalhousie Street, Brantford
Founded: 1926. Member: Royal Architectural Institute of Canada; Royal Institute of British Architects, England. Theatres:
(Designer of many theatres in the British Isles and imported to Canada by the J. Arthur Rank Organization in 1947 as consultant in completing a building program of 20 theatres. Now in private practice.)

GIBSON and POKORNY
61 Charles Street, W., Toronto
Founded: 1945. Member: Royal Architectural Institute of Canada; Ontario Assn. of Architects. Contributed: Canadian Homes and Gardens; The Journal of R.A.I.C.; Canadian Art; Architectural Record. Theatres: Beach, Toronto, Ontario (under constr.); PLAZA, Oshawa, Ontario (1949); CAPITOL, Brockville, Ontario (1948); RICHMOND HILL, Richmond Hill, Ontario (1948); PALACE, Cornwall, Ontario (1947); RUNNYMEDE, Toronto, Ontario (1946).

A Peek Into the Crystal Ball*

Even in the midst of the holiday rush, when exhibitors are putting forth their best efforts to cash in on the entertainment needs of weary Christmas shopping crowds, it is worthwhile to pause a moment to consider the future. Just what will the cherub of 1950, at the moment strutting across theatre screens to extend the best wishes of the management to patrons for a happy and prosperous New Year, bring to the theatre itself? Aside from the omnipresent question of boxoffice grosses, will the theatre change appreciably in its physical character?

The role of soothsayer is always an uncertain and dangerous one for even the most experienced and intuitive veteran showman to undertake, but, armed with careful studies of 1949 developments and an undying confidence in the Gods who govern the industry, we fling ourselves on the speculative treadmill.

First of all, it is our belief that drive-in theatre construction has by no means yet reached the saturation point. A few crotchety prophets proclaimed with self-righteous assurance last year at this time that the drive-in boom would soon collapse. The flocks of new ozoners erected and successfully operated during 1949 and those still in the process, however, have proven them wrong beyond any shadow of doubt. Nor do we foresee the smouldering last embers of this entertainment wildfire in 1950, although its pace may slacken somewhat. The drive-in has woven itself securely into the American legend, and, while its numbers have multiplied in "rabbit-like" fashion, there are still many localities untouched where it can turn a good dollar. The 12 months ahead, we venture to say, will mother a host of new drive-ins with bigger and better landscaping, sign towers, screens, recreational facilities, etc.

Secondly, since there appears to be no letup in the furious pace at which Detroit is turning out that beloved Nemesis of free and easy pedestrian movement, the automobile, it is more and more likely that theatres in relatively congested areas will either have to find larger accommodations for patrons vehicles or suffer mounting losses. This automotive tidal wave of constantly increasing proportions will, we predict, prompt more and more new theatres to be built with much larger parking areas or incorporated into community shopping centers, where ample space will be available for every potential theatre patron. It is not imprudent to say that the automobile is probably a far greater threat to boxoffice receipts than is television, so a vigorous campaign will be made to conquer it in the months which lie ahead.

Thirdly, we predict that an increasing number of exhibitors will come to look upon television as an ally, rather than as a dreaded foe, and take steps to provide television lounges for its regular showings, as well as keeping abreast of technological developments which will enable them to follow the lead of others in presenting special events on their screens.

Lastly, we expect to see more remodeling of older houses and greater concentration in new construction on providing the acme in luxurious appointments for the patron's comfort and convenience, despite the high cost of materials. By this time even the most lackadaisical exhibitor has surely awakened to see the handwriting on the wall—the moviegoing public is becoming constantly more finicky about the physical assets, as well as the film fare, offered at the theatres it attends. Houses which persist in retaining second-rate equipment simply will become extinct in time. In short, theatres which have not already gotten on the modernistic "catering-to-the-patron" bandwagon must do so or perish by the wayside in the face of growing competition from sporting events and other forms of entertainment.

Whatever expected developments or surprises 1950 will bring, our faith remains unshaken in the theatre's ability to maintain its position as the favorite place of family entertainment attendance. Its future belongs to all of us, and its careful nurturing is the personal responsibility of every theatreman, be he architect, builder, or operator.

*The above Editorial was originally carried in the PHYSICAL THEATRE DEPARTMENT of the weekly motion picture trade paper EXHIBITOR, in the issue of December 14, 1949; but as this annual edition of its sister publication THEATRE CATALOG reaches final press date several months later, its views are still as pertinent and timely as they were then. This Editorial is reprinted with considerable pride.

KAPLAN and SPRACHMAN
305 Dundas Street, W., Toronto
Founded: 1921. **Member:** Architects Assn. of Nova Scotia, New Brunswick, Quebec, Ontario, British Columbia. **Contributed:** THEATRE CATALOG—1942, 1945. **Theatres:** BIRCH CLIFF, Toronto, Ontario (1949); MOUNTAIN, Hamilton, Ontario (1949); TOWNE CINEMA, Toronto, Ontario (1949); DOWNTOWN, Toronto, Ontario (1948); ELGIN, Ottawa, Ontario (1948); ELMDALE, Ottawa, Ontario (1948); ESPANOLA, Espanola, Ontario (1948); MINDEN, Ottawa, Ontario (1948); NORTH EAST DRIVE-IN, Toronto, Ontario (1948); NORTHWEST DRIVE-IN, Toronto, Ontario (1948); ODEON, Sturgeon Falls, Ontario (1948); PARAMOUNT, St. John, N. B. (1948); PARAMOUNT, Halifax, N. S. (1948); PARAMOUNT, Port Arthur, Ontario (1948); SKYWAY DRIVE-IN, London, Ontario (1948); SKYWAY DRIVE-IN, Windsor, Ontario (1948); VAUGHAN, Toronto, Ontario (1948); CENTURY, Sudbury, Ontario (1947); GLENDALE, Toronto, Ontario (1947); NELSON, Ottawa, Ontario (1947); SKYWAY DRIVE-IN, Stoney Creek, Ontario (1946); CENTRE, Chatham, Ontario (1941); ODEON, Kingston, Ontario (1941); ODEON, Sarnia, Ontario (1941); VOGUE, Vancouver, B. C. (1938).

MOLESWORTH, SECORD and SAVAGE
18 Toronto Street, Toronto 1
Founded: 1919. **Member:** R.A.I.C.; O.A.A.; Toronto Chapter, O.A.A. **Contributed:** THEATRE CATALOG—1948-49. **Theatres:** ODEON, Newmarket, Ontario (under constr.); ODEON, Stratford, Ontario (1949); ROXY, West Hill, Ontario (1949); ROXY, Acton, Ontario (1948); ROXY, Brampton, Ontario (1948).

POKORNY
(See GIBSON and POKORNY)

SAVAGE
(See MOLESWORTH, SECORD and SAVAGE)

SECORD
(See MOLESWORTH, SECORD and SAVAGE)

SPRACHMAN
(See KAPLAN and SPRACHMAN)

QUEBEC

FREEDLANDER
(See H. E. GREENSPOON and P. FREEDLANDER)

GREENSPOON, H. E. and P. FREEDLANDER
4151 Sherbrooke Street, W., Westmont
Associate: J. Dunne, Architect. **Founded:** 1933. **Member:** Province of Quebec Assn. of Architects; Ontario Assn. of Architects; New Brunswick Assn. of Architects. **Contributed:** Architecture; Painting and Decorating; Architectural Forum; THEATRE CATALOG—1948-49. **Theatres:** OTTAWAN, Hawkesbury, Quebec (1949); BIJOU, Montreal, Quebec (1948); CHAMPLAIN, Montreal, Quebec (1948); CREMAZIE, Montreal, Quebec (1948); MERCIER, Montreal, Quebec (1948); ELECTRA, Montreal, Quebec (1947); EMPIRE, Montreal, Quebec (1947); ROXY, Coaticook, Quebec (1947); ROXY, St. Agathe, Quebec (1947); VILLERAY, Montreal, Quebec (1942); KENT, Montreal, Quebec (1941); VERDUN PALACE, Montreal, Quebec (1941); CENTRE PALACE, St. Charles, Quebec (1940); SEVILLE, Montreal, Quebec (1940).

The Legal Position of Design Patents

The Noted Case of Loew's Drive-In Theatres, Inc.,* vs. Park-In Theatres, Inc.,** is Briefly Reviewed

By HERMAN M. LEVY
General Counsel, Theatre Owners of America, Inc.

BRIEF: ***As an interesting sideshow to the feature attraction . . . the growth of the drive-in theatre industry during the past decade . . . a heated controversy has raged over the legality of the original Hollingshead patent . . . a claim made for the retention of exclusive inventor's rights on the general layout of an outdoor showplace . . . Park-In Theatres, Inc., . . . present owner of the patent . . . has waged a heated battle in the courts . . . since 1938 . . . to compel Loew's Theatre's, Inc., to continue royalty payments for use of the patent . . . and to make reparations for use of the same after patent license privileges had been revoked.***

Finally, after numerous hearings by, and appeals to, various courts . . . including the U. S. Supreme Court . . . there appears to have emerged what may be the close to a long-disputed case . . . At any rate . . . in spite of the fact that drive-in construction has gone its way without much concern over the outcome of the case . . . there seems to be little reason for owners to fear that they will ever be called before the Bar of Justice . . . to account for usurpation of a sound design patent.

Briefly, the facts and issues are these: Park-In Theatres, Inc., hereinafter referred to as Park-In), a New Jersey Corporation, is the present owner of a United States patent for drive-in theatres, which was originally issued to one Hollingshead. In 1937, Park-In licensed Loew's Drive-In Theatres, Inc. (hereinafter referred to as Loew's) to operate a drive-in theatre in Providence, R. I. Loew's was to pay a percentage of its gross receipts to Park-In as royalties. Loew's paid these royalties for the year 1937, but when it reopened the theatre in 1938, it refused to continue to pay, on the advice of counsel that the license was illegal and that the patent was invalid because it did not involve a "patentable" invention. Park-In immediately cancelled the license and started legal action to collect unpaid royalties, plus damages for patent infringement because Loew's kept the drive-in theatre open after the license had been cancelled.

The main defense which Loew's raised to both claims was that the Hollingshead patent was invalid because it was not issued for a "patentable" invention. The lower court found for Park-In, to wit, that the patent for the drive-in theatre structure was valid, since the development of the drive-in theatre required an exercise of the "faculty of invention." Loew's appealed from that decision to the Circuit Court, which reversed the lower court. It conceded that a drive-in structure could be the subject of a valid patent, but it held that this particular drive-in theatre structure could not be because there was nothing "inventive" in it. The Court discussed the three main features of the Hollingshead drive-in theatre patent as follows:

(1). The arrangement of the cars in an arc around the screen:

"But nevertheless there is nothing inventive in adpating the old arcuate arrangement of seats in a theatre to automobiles in a parking lot as the means to achieve horizontal pointing."

(2). The arrangement of cars on a slope or grade:

"Certainly terracing the parking lot as the means for giving occupants of cars in the rearward rows of stalls a clear field of vision over the tops of cars in front is not inventive. It is again only an adaption of the familiar sloping floor of the conventional theatre."

(3). Tilting the front end of the car upward toward the screen by parking the car on an inclined plane or mound:

"Again the problem of accurate aiming due to the limitation imposed upon the field of vision by the windshield is present. But again, as in the matter of horizontal pointing, solution of this problem does not seem to us to call for an exercise of the inventive faculty."

The theory of patents under which the Court acted, and its conclusion, may be briefly summed up in its own words:

"An idea of itself is not patentable, but a new device by which it may be made practically useful is."

"In view of our own analysis of Hollinghead's means, we are of the opinion that the ultimate finding of the court below, that an exercise of the faculty of invention was required to devise these means, was clearly erroneous."

At the time of the rendering of the decision on appeal, some confusion arose in exhibitors' thinking because of what appeared, at first, to be an inconsistency between that decision and that of Park-In Theatres vs. Rogers, 130 Fed. (2) 745 (California). The latter involved substantially the same issues as the Loew's case, but, in the California case, all the Court decided was that a drive-in theatre structure could be the subject of a patent, (but it did not decide whether or not the Hollingshead drive-in theatre was patentable) because the Court did not have before it the evidence to decide whether the exercise of the "faculty of invention" was required by the Hollingshead drive-in theatre. In the Loew's case, the Court did have that evidence and decided in the negative.

There is an unwritten principle, based on experience and history, that where there are two or more inconsistent decisions by Federal Circuit Courts, the Supreme Court of the United States will often be inclined to hear an appeal in order to clear up the confusion. Comparing these two decisions, however, no inconsistency can be found. The Supreme Court refused to hear the appeal.*** The Court, as customary, gave no reasons for refusing to do so.

Park-In, the owner of the patent, after the denial by the U. S. Supreme Court to grant it the privilege of appeal, filed an application with that Court requesting it to reconsider its decision. The application for reconsideration was turned down by the Court on Monday, December 5, with no memorandum.

It is not wise to predict what courts will do if Park-In decides now to sue others who have refused to pay royalties, or for damages for infringement. It is not unlikely, however, that courts will be guided substantially by the decision in the Loew case and by the refusal of the U. S. Supreme Court to hear the appeal, and by its refusal to reconsider that denial.

ABOUT THE AUTHOR

Herman M. Levy received a B.A. degree from Yale University in 1927 with Phi Beta Kappa standing. After graduation from Yale Law School in 1929 he worked as an attorney for RCA Photo Phone, at a time when motion picture talking equipment was first being marketed.

In 1930 Levy began practicing law in New Haven and has been an attorney in motion picture industry matters since that time. He was elected Executive Secretary of the Motion Picture Owners of Connecticut in 1939 and still serves in that capacity.

The year 1946 saw Levy elected General Counsel of Motion Picture Theatre Owners of America, a post which he held in 1947 also. In September of that year, when the American Theatres Association and Motion Picture Theatre Owners of America were merged, he was elected General Counsel, Theatre Owners of America.

** These are the E. M. Loew (Boston) interests, not to be confused with Loew's, Inc.*

*** Decided by the United States Court of Appeals in the First Circuit, April 8, 1949.*

**** Appeal to the Supreme Court of the United States in this type of case, as in most others, is not a matter of right. The Supreme Court has to grant permission for the taking of the appeal.*

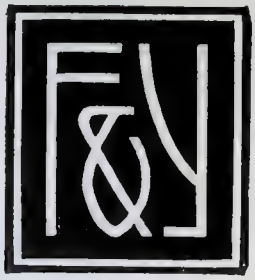
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* Names of theatre owners upon request.

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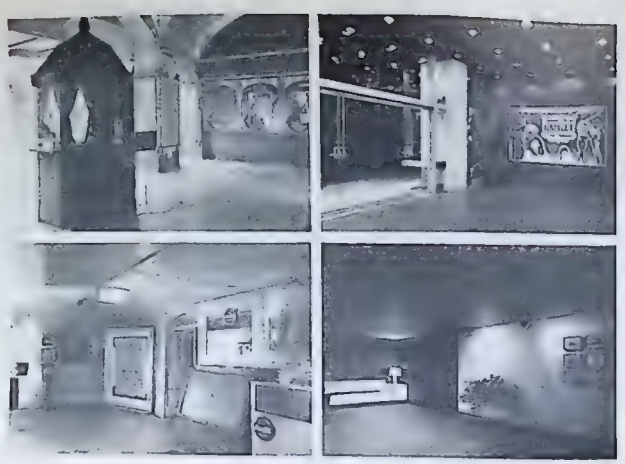
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Theatre Owners who are determined to keep attracting their profitable share of attendance recognize the value of modernization.

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Imaginative design transformed this obsolete theatre into a modern showplace with an expenditure most theatres can afford.



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CONSTRUCTION and MATERIALS

1949-50

Construction Study of the Miller

A Pictorial Record of the Structural Steps in the Erection of a Normal 1,242-Seat Modern Theatre

BRIEF: *Approximately 450 times during 1949 ground was broken and actual construction was started on new theatre buildings . . . and after varying periods of time . . . dependent on their size, ornateness and building difficulties . . . all 450 accomplished their opening night . . . Down through the history of the theatre industry . . . in every city and hamlet throughout the world that boasts a theatre . . . this same original spade of earth . . . and this same gala opening . . . has taken place several hundred thousand times . . . But, while much is recorded about the finished theatre . . . little is known about the trials and tribulations of building . . . except by those who have been through it . . . As a further extension of its accepted service . . . the editors of* THEATRE CATALOG *decided to cover pictorially the construction of one theatre from its embryonic stages . . . and the following record . . . plus the dramatic, modern theatre which resulted . . . is here presented as a routine guide to the men who build future theatres in later years.*

Lewistown is an average American town of 13,000 population situated in the rolling hills of central Pennsylvania. Its industry consists mainly of some railroad shops and a few medium-sized factories; and it is well insulated by open country from any large neighboring communities. The people are normal in every way and like entertainment and amusement to the place where the three old theatres (one of just over 700 seats, and two of 600) were able to do very satisfactory grosses with no move-over runs. All was quiet for a number of years.

Background

Just off the main square and in a good business location, one Dan Miller, a local businessman of some stature, had assembled, over a period of years, a number of adjacent properties with the intention of erecting an office and store development containing a new and larger theatre that he thought his home town both needed and deserved. Toward the end of World War II he brought this project to a head and rough plans were drawn. Negotiations with William G. Humphries, lessee of one of the town's older theatres, proved that at the current costs as planned such a theatre could not be profitably operated. Further negotiations and changes in the plan brought final agreement, and Architect William Lynch Murray, of Harrisburg, Pa., was commissioned to proceed.

Construction

Ground was broken about June 1, 1948, and the accompanying series of progress photos were started on June 28 after certain demolition and grading had been done.

Typical of modern times, a steel strike caused a lengthy delay in the fall of that year, so that the finished walls stood roofless and idle for several months, but, on April 1, 1949, the resplendent Miller opened its doors as a tribute to the zeal and town pride of its founder, Dan Miller.

Result

Boasting the only modern air conditioning in town, 1,242 new upholstered chairs, and all modern refinements in patron comforts and conveniences, it was successful from the start. And, oddly enough from all reports, it bolstered the town's theatre attendance to the place where the other three theatres continued to do satisfactory business. At least, as this is being written, none have closed. And while the new Miller is causing a minor product shortage through its ability to liquidate patronage more speedily with its larger seating capacity—all is again quiet in Lewistown!



1. JUNE 28, 1948 the site has been cleared and the footings have been poured. The masons have started the foundation and basement walls. Construction of the new Miller has now actually commenced.



2. JULY 5, 1948 the excavated area is now taking shape and the tenant storage under the stores, together with several machinery and equipment rooms, are now commencing to take on definite outlines.



3. JULY 12, 1948 the walls are progressing and the approximate slope of the auditorium floor of the theatre has been established.



6. AUGUST 2, 1948 the masonry work is progressing and the floors are being poured in the basement area. Form work is progressing also.

4. JULY 20, 1948 the masons are making progress and the return air and pipe trench down the center of the theatre is taking shape.



7. AUGUST 9, 1948 steel is being placed to support the first floor construction, one section of which will provide the lobby area.

5. JULY 26, 1948 wall columns have been omitted due to the steel strike, and pilasters to brace the walls are therefor being provided.



8. AUGUST 16, 1948 the masonry progress continues, and the structural frame and support, for the second level of the front, is now in work.







9. AUGUST 23, 1948 the walls are at their full height and more steel has been placed. Floors of the lobby and one store have been poured.



12. SEPTEMBER 13, 1948 the rear wall is practically completed. Concrete slab is poured and masons are laying finishing brick out front.



10. AUGUST 30, 1948 the long span trusses are still delayed so temporary braces have been placed inside of the auditorium walls.



13. OCTOBER 4, 1948 the walls of the auditorium have been run to their full height and masons have finished the first floor front.

11. SEPTEMBER 6, 1948 the floor framing and reinforcing mesh is in place for the pouring of the lobby and standee area concrete slab.

14. OCTOBER 11, 1948 there is still no roof steel but the second floor concrete slab has been poured and the window sills are in place.







15. FEBRUARY 24, 1949, four months have elapsed and the arrival of steel has permitted the completion effort on ceiling and wainscot.



16. ANOTHER VIEW on the same date, shows the screen pocket and finished plastering at the front end and the rough framing for standee rail.

17. THE FRONT on the same date, shows the brick work completed, steel sash and windows in place. The second floor offices are occupied.



And Here Is the Finished Theatre as It Looked on the Opening Night

Through all the trials and tribulations of the steel strike and winter weather, the embryonic theatre grew and progressed into a really impressive gem among neighboring theatres. Its exterior sign work was forceful and show-selling, focusing on it the attention of the town. Its exterior lobby was bright and inviting; and as the patron progressed over the large-figured, heavy piled carpeting of the inner lobby, and saw its orderly good taste and modern appointments, he was sold on the fact that this theatre catered to him and to his most extreme demands in comfort and relaxation.

Once inside the spacious standee area and foyer where he could see the dignified grandeur of the auditorium, this feeling of a prepared welcome was further enhanced. Here were richly carpeted aisles, heavily upholstered and padded arm chairs, well distributed and adequate air conditioning, tasteful ornamentation and rich curtains. On the second level were modish lounge and toilet rooms, a "cry-room" for mothers with growing children, a private screening room, and the most modern of projection and sound equipment.

This, was a modern theatre!



18. APRIL 1, 1949 and all is in readiness for opening. The impressive sign by Superior Sign Co. boasts of 10" Wagner plastic letters.

19. OPENING NIGHT and all is ready, from the Berlo candy stand, the Aluminex frames, and Crestwood carpets, to the Automaticket stub rod box.





20. THE AUDITORIUM sidewalls are damask in figured coral and rose, and the ceiling is gray green. Decoration is by David Brodsky Associates.



23. A CRY ROOM in the right rear is flanked by a private screening room in the left. Mothers and children will enjoy the above room.

21. AUDITORIUM REAR shows the 1242 Heywood-Wakefield deluxe chairs, the Crestwood carpets, and the ceiling air diffusers, all for comfort.



24. LOUNGE ROOMS that are large and well equipped lean toward the modern in furnishing, and decoration, with the accent on comfort.



22. SECOND FLOOR LOUNGE ROOMS are reached by this well lighted stairway. Wall papers and white mahogany veneers are used effectively.



25. A LARGE PROJECTION ROOM features Simplex projectors and sound, Peerless lamps, Hertner generator, Goldberg rewinder, etc.



An All-Aluminum Prefab: At $60 a Seat

The Potentialities of Aluminum as a Theatre Structural Metal Win Successful Realization

BRIEF: *Had he been asked to single out one metal to which his legendary poetic phrase . . . "a thing of beauty is a joy forever" . . . might be most suitably applied, it is certain that Keats would have chosen aluminum . . . for the beauty of aluminum . . . in all its burnished splendor . . . does last forever . . . Light, yet durable, aluminum defies the ravages of the elements to remain seemingly ageless year after year.*

Due to its powers of resistance to rust and other damaging mischief of the weather . . . it was only natural that aluminum should come to be chosen for a stellar role in the motion picture theatre . . . For some time now aluminum has been extensively used in various parts of theatre . . . and everywhere it has been met with a rousing reception by theatremen . . . quick to note its charm, consistently maintained without effort after its initial inexpensive installation.

It was not until rather recently, however, that aluminum was seriously considered for the principal role of the theatre structure itself . . . There was apprehension in some quarters that aluminum wouldn't be able to "take it" . . . when exposed constantly to all the furies of the skies . . . or that it would be too difficult, costly, and impractical to erect a theatre with an aluminum shell . . . An enterprising Chicago building firm, Fairfield Enterprises, Inc., and their chief engineer, T. J. Theodore . . . confident that aluminum could stand the test . . . proceeded to build just such a theatre . . . following the plan of the "Alumi-Drome" . . . developed by the Reynolds Metals Company and presented in a former volume of THEATRE CATALOG.

The result . . . a comfortable 600-seat house built at an amazingly low cost and ready to take its place with the best of small conventional theatres . . . The following article is a case history of how aluminum achieved another triumph in the building of an all-aluminum prefab with no important facilities lacking . . . in spite of a kindly treated pocketbook.

INTRODUCTION

Aluminum, "wonder boy" of metals with its lightness, strength, and immunity to rust, was not content for long to restrict its talents to kitchen pots and pans. Although aluminum still maintains its loyalty to the grateful housewife, it has branched forth into dozens of other industrial and commercial fields to offer its unique natural gifts at low cost.

It was only natural that in this "growing process" aluminum should come to bestow its prize abilities on the theatre field. Day by day, more and more theatres are seeking aluminum for brightening up their exteriors, boxoffices, marquees, foyers, displays, lobbies, stairs, lounges, rest rooms, etc. Aluminum has endeared itself steadfastly to those theatremen, who have made use of it, by relieving them of doldrums about maintenance costs. Rust, ravenous enemy of most metals, encounters a solid and adamant bulwark when it meets aluminum, so it has won laurel after laurel of gratitude from owners who have seen it remain bright and durable year in and year out.

In view of its increasing importance in theatre applications, it was only natural, then, that aluminum should receive deserved and extensive treatment in the Sixth Annual (1947-48 Edition of THEATRE CATALOG. A discussion of the many practical applications which had been found for aluminum in the theatre of today was followed by a study of the "Alumi-Drome" theatre as a construction possibility which seemed to offer outstanding advantages. This all-aluminum, self-supporting, arch-type, prefabricated structure was a standardized unit 36 feet wide and 60 feet long which could be lengthened by adding as many additional 6-foot sections as desired. Each section was anchored to a concrete foundation which extended a foot above the ground, and added height could be obtained by use of a higher concrete foundation. At that time it was considered feasible to use the "Alumni-Drome" on a 10-foot wall to give the structure an overall height of 28 feet.

Since this initial introduction of the aluminum pre-fab idea, the editors of THEATRE CATALOG have anxiously awaited the day when drawing board sketches and specifications would take realistic form. The opportunity has now arrived to present the first known actual example of the all-aluminum pre-fabricated theatre.

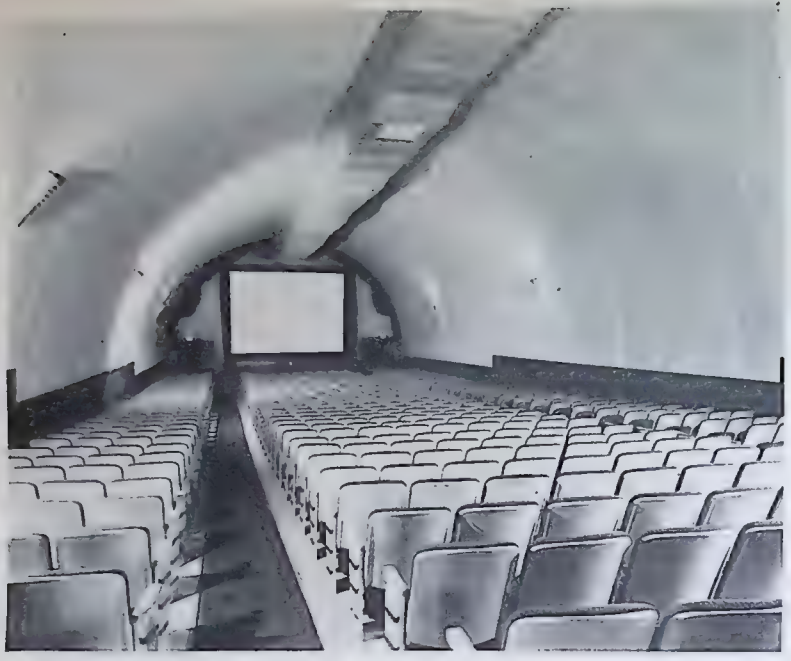
THE ROSE, FRANKLIN PARK, ILL.

After a year of intensive investigations and studies of the special problems involved in low-cost theatre construction, the 600-seat Rose was erected in three months at the spectacularly cheap price of $60 per seat (less equipment) and opened on Christmas Day, 1948. It is interesting to note that a 1400-seat conventional theatre, which required a year to build in a neigboring suburb, reportedly cost in excess of $200 a seat.

Prior to the war, the population of Franklin Park approximated 3,000, but military developments prompted the location of 60 different factories in the town, and a private low-cost housing project swelled the population beyond the 10,000 mark. In the face of this radical change in the community's physical size, the erection of a theatre, considered before the war to be unwarranted, became a necessity. At the time, however, governmental building restrictions and materials priorities prevented the immediate

TRIM, NEAT AND FUNCTIONAL is the all-aluminum Rose. It makes no pretentions to grandeur, but with a low first cost and a low overhead it could show a profit in many areas that are not currently served.





SIMPLICITY marks the auditorium with light tan acoustical board, brown wainscot, and burgundy drapes.

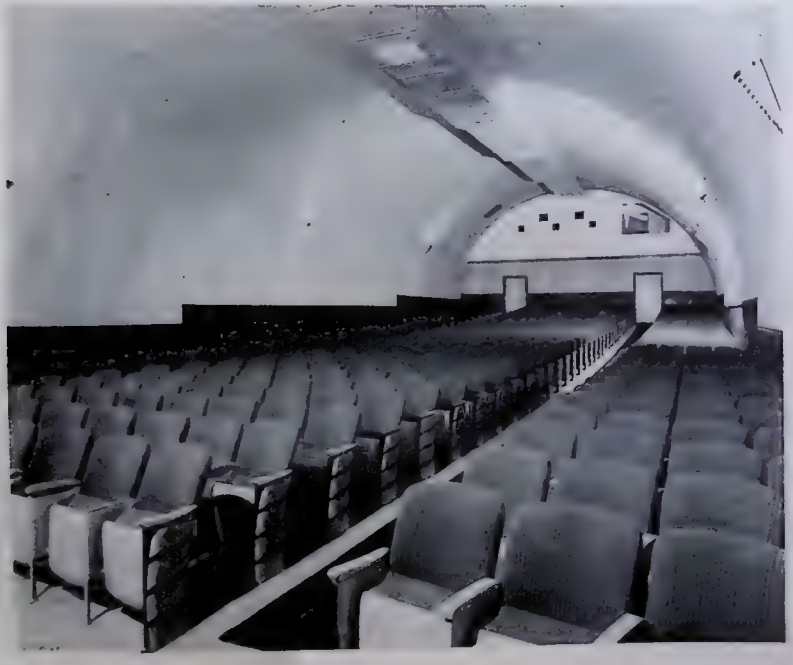
fulfillment of this vital community entertainment need, but, when controls eased up with the cessation of hostilities, steps were taken toward provision of this overdue recreational asset.

Fairfield Enterprises, Inc., Chicago designers and builders, thus began a careful search for a low-cost, pre-fabricated structure which could be erected quickly and inexpensively. The Reynolds "Alumi-Drome" was finally selected because it possessed all the desired qualities which the firm was seeking. The fact that its heavy-gauge sheets of embossed aluminum are firmly grasped by aluminum framing members on all sides, so that there are no loose edges to catch the wind, be bent out of shape or cause seepage of water, was one appealing factor which determined the final choice. The all-bolted patented assembly of the "Alumi-Drome" also aided in producing a strong, weather-tight, and attractive building at great savings in construction time, labor, and materials.

The aforementioned rust-resistant qualities of aluminum likewise played an important part in its selection as a construction material for the Rose. As a matter of fact, weathering, which often produces irreparable damage to other structural materials, generates a tough aluminum oxide coating which gives added protection and life without altering the permanent silvery appearance of the metal. Thus, annual paintings, caulkings, and repairs are totally eliminated for the life of the structure.

Aluminum gives the Rose still another point of appeal by its remarkable insulating properties. Due to the fact that aluminum by its very nature reflects back 95 per cent of the radiant heat which strikes its surface, it eases considerably the task of keeping a theatre interior cool in the summer. By the same token, winter heat is reflected back inside with little loss through the walls and roof. These inherent advantages of aluminum, which make possible continuous savings in initial cost of heating and cooling equipment, power, fuel, and maintenance, are enhanced by the arch shape of the building.

COMFORT is obtained through upholstered chairs, air conditioning, carpeted aisles and adequate lighting.



Front

An appealing, but durable and economical, front has been obtained by use of red brick veneer with lannon stone trim, while a cement plaster finish has been used above the marquee. Both the front and rear ends of the building have been enclosed with concrete blocks. Varigated colored neon provides back lighting for the glass-block boxoffice, while the two display frames set on the front wall are also illuminated. A parking lot adjacent to the front is graded and surfaced with cinders and will be landscaped.

The frame-construction marquee is roofed by a standard 5-ply asphalt and gravel finish. The edge is covered with fluted aluminum 10" high, while cement plaster has been laid on metal lath to form the under-surface. Ten 150-watt sealed beam flood lights are recessed along the outer edge to furnish brilliant lighting. Copy is easily changed on the double-faced attraction board by walking out on the marquee.

Lobby

Brick partitions of the small, yet efficient, lobby are covered with plasterboard and finished in contrasting cheery patterns of wall paper. Patrons cross the asphalt tile floor to the refreshment stand, strategically located directly opposite the entrance. The compact and comfortable rest rooms are located at the opposite end of the lobby. An acoustical tile ceiling cuts down noise in the lobby to an appreciable degree. An open stairway with a wrought iron balustrade leads up to the second floor.



MODERN APPURTENANCES in the form of a small but well stocked candy stand, a corn popper, and tiled floors, grace a compact lobby; while a private screening or "cry" room on the second level has twelve moveable chairs and a carpeted floor to produce a home-like effect for those who use it.



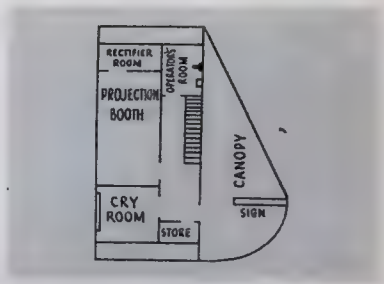
Auditorium

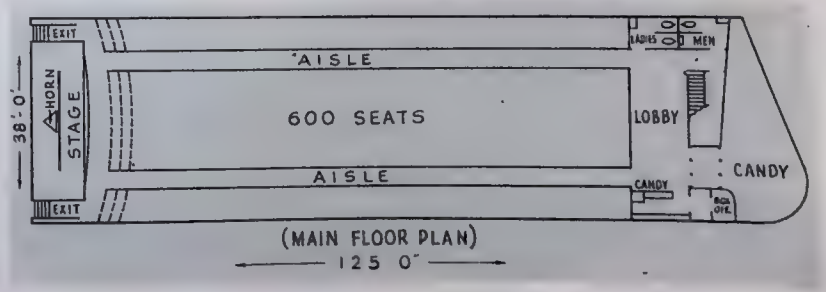
The interior of the Rose's auditorium is finished in light tan Nu-wood panels half an inch in thickness, set above brown masonite presdwood wainscoting. Behind the panels a continuous layer of fiberglas blanket-type insulation is attached to two-inch furring strips 16" on center. A three-inch dead air space between the fiberglas blanket and the aluminum exterior completes a thermal insulation deemed to be fully equivalent to masonry construction. This interior surface is also highly sound-absorbent and enhances acoustics to the point where echoes, reverberations, and outside noises are effectively deadened. The acoustical qualities of the auditorium have even been developed to the point where heavy storms have not been able to create a drumming noise of any consequence on the arched roof. Any faint beats made by the elements are completely quelled by a slight raising of the sound volume.

The scientifically sloped reinforced concrete floor permits good screen visibility from every part of the auditorium. The 600 upholstered chairs are arranged in three banks with metal parts done in sand-colored baked enamel and the backs covered in a striped maroon mohair; the seats are covered in maroon leatherette. The plastic screen, 13½ by 18 feet in size, is draped with hammered green satin curtains and a burgundy velvet valance which follows the arch contour of the building. Burgundy velvet has also been used to drape the fire exits flanking the stage.

A single aluminum duct for both heating and cooling runs the entire length of the building with return air removed from the front of the stage. Heat is furnished by a hot air furnace, a 15,000 cfm. blower, and an automatic oil burner. Cooling is accomplished by a 25-ton direct expansion compressor and evaporative condenser.

FLOOR PLANS reveal the manner in which the maximum use is gotten from every square inch of building contents. There are no waste spaces to be heated or cooled—everything needed is there.





Second Floor

The upper floor of the Rose, in which six-inch reinforced concrete has been used, is partitioned into a "cry room," projection room, rectifier room, and operator's rest room. The "cry room" is capable of accommodating 12 mothers and infants with a carpeted floor and movable chairs to give it a home-like atmosphere. The projection booth is entirely fire-proof with eight-inch brick walls and plaster laid over a metal lath ceiling.

CONCLUSION

Due to the singular advantages which aluminum affords as a theatre structural metal, it is not beyond the scope of reason to expect that the Rose may well be the first in a long series of other aluminum pre-fabs. In all probability, as other theatremen come more and more to appreciate its appeal from the angles of appearance, weight, and durability, future construction, particularly in those operations where cost is a vital factor, will embrace aluminum to an increasing extent. This revolutionizing turn to aluminum as the answer to budget problems will undoubtedly, for the most part, be primarily notable in small neighborhood houses with seating capacities below, or slightly above, the 500-seat mark.

Whatever the future brings, aluminum has definitely come into its own, not only as a valuable metal for the interior appointments of a motion picture house, but as its basic shell also. Its many advantageous factors are bound to win the growing attention of architects and builders, so that before long we may well expect to see dozens upon dozens of shimmering aluminum theatre buildings glittering in the rays of the sun.

Marble: Its Selection, Installation and Care

A Prince of Building Materials, Prized for Its Beauty and Life, Marble Deserves Proper Upkeep

BRIEF: ***Marble, ageless and marvelous product of Nature's creative ingenuity, has been a favorite building material since time immemorial . . . It has held in trust the splendor of the Greek masters, the glory that was Rome, and the art of the Renaissance . . . Today, it is still prized by architects as a gracious and durable construction medium . . . In the theatre it plays an important role in facings, lobbies, washrooms, and dozens of other places . . . To aid the architect in selecting the correct type for a particular application, marbles have been classified in four distinct groups . . . The following article lists these classifications . . . gives valuable tips on correctly installing marble . . . and instructs the theatre owner in the proper ways to maintain the original charm of his marble showpieces.***

MARBLE AS A THEATRE SUBSTANCE

Marble has attained an important place among theatre building materials primarily because of its unique combination of beauty with economy and charm with utility. Although the initial expense involved in the purchase and installation of marble may be somewhat higher than that of other materials, it cannot be matched for durability and ease of maintenance once the installation has been made. Marble will resist in a remarkably stalwart fashion the ravages of weather and other abuses, and it will stand up against extremely rough treatment without showing signs of cracking. A simple periodic cleaning is all that is required to keep it in first-class condition.

It is for these reasons that marble has come to be recognized as a valuable construction material for theatres as well as for other types of public buildings. Throughout the years it has become a theatre favorite for: lobby walls, wash rooms, counter tops, escalators, floors, tiles, stairs, toilets (partitions, backs, and walls), urinal stalls, exterior veneers, and wainscotings. Aside from the charming touch it lends to the aesthetic appearance of a showplace, marble is heralded by the janitorial staff as a true godsend because it is so simple to maintain.

MARBLE SELECTION

Since the different parts of the theatre in which marble is employed will each be subjected to varying conditions, it is important that the architect select the proper type of marble for every application. Inasmuch as the marble facing of a theatre will undergo different types of stresses than those placed on marble used in a washroom, for example, great care must be taken in selecting a marble with the proper physical characteristics for the particular application in which it is to be used. There are more than 200 domestic and imported marbles on the market today, and the theatre architect should be thoroughly familiar with the physical characteristics, as well as with the coloring, of each type.

In order to aid the architect in selecting the type of marble best suited to fulfill the particular purpose he has in mind, the Marble Institute of America, an organization composed of marble importers, wholesalers, producers, quarriers, dealers, contractors, and finishing plants, has classified the numerous commercially available types of marble into four groups, the basis of classification being the characteristics encountered in finishing.

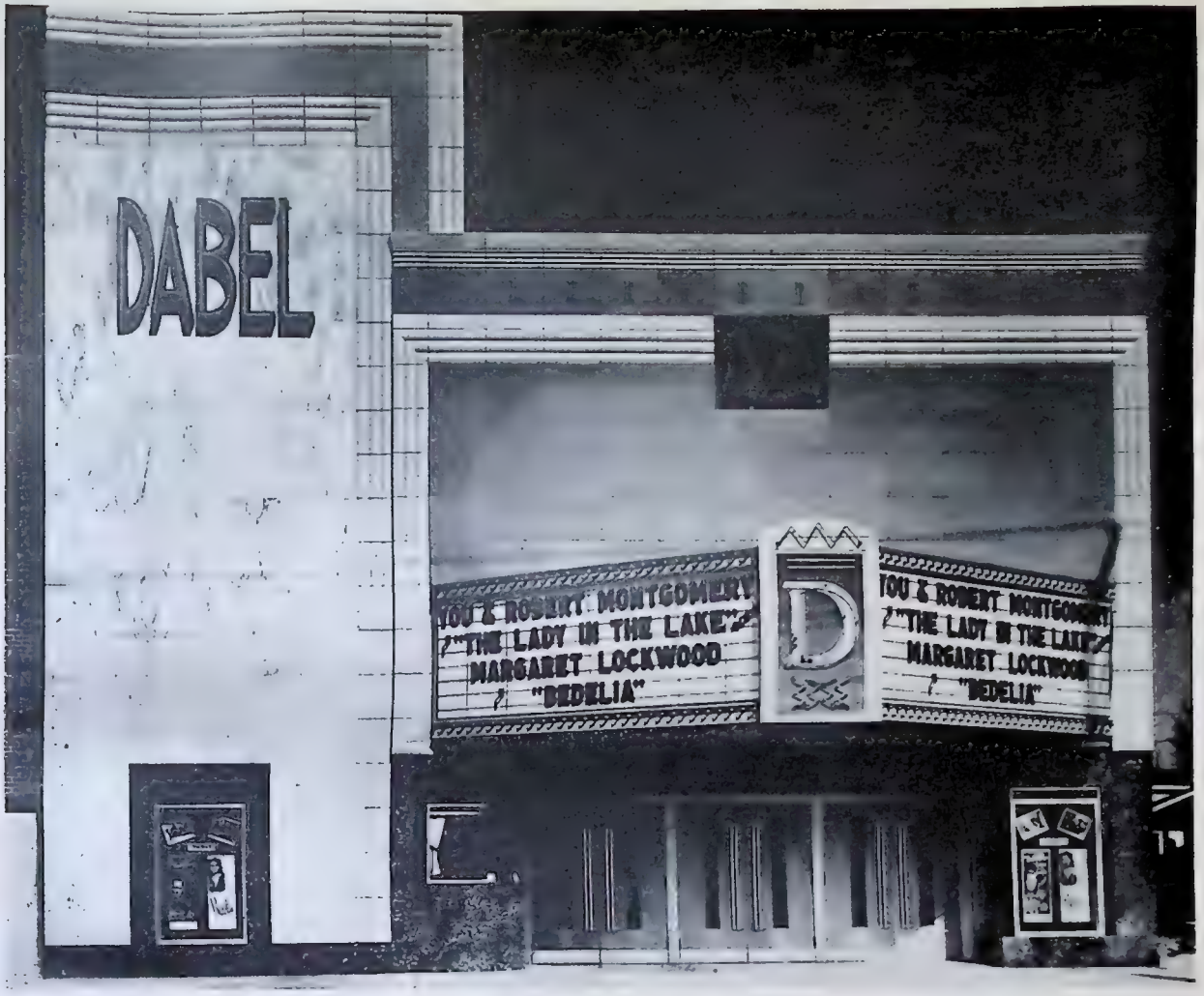
Group A

The following domestic and imported marbles, considered to be sound marbles and stones with uniform and favorable working conditions, are designated as Group A:

Acme Pink	Tennessee
Baker Dark Cedar	Tennessee
Best Light Cloud	Vermont
Blanco P	Italy
Blount Pink	Tennessee
Blue Cloud	Alabama
Bond Clairose	Tennessee
Bond Dark Cedar	Tennessee
Bond Pink	Tennessee
Brocadillo	Vermont
Broshell	Tennessee
Buff Kasota Fleuri	Minnesota
Buff Kasota Veine	Minnesota
Carrara Statuary	Italy
Carrara White (Blanc Clair)	Italy
Cedar Tavernelle	Tennessee
Champion Gray	Tennessee
Champion Pink	Tennessee
Cherokee	Georgia
Clouded "A"	Alabama
Craig Pink	Tennessee
Cream "A"	Alabama
Creole	Georgia
Edward Pink	Tennessee
Ellis Pink	Tennessee
Ellis Tavernelle	Tennessee
English Vein	Italy
English Vein	Vermont
Etowah Pink	Georgia
Florence	Vermont
Fossil Black	Vermont
French Dark Cedar	Tennessee
French Pink (Appalachian)	Tennessee
French Pink Tavernelle	Tennessee
Frequa Dark Cedar	Tennessee
Gray Eagle Gray	Tennessee
Hamil Pink	Tennessee
Henderson Dark Cedar	Tennessee
Highland	Vermont
Huron	Indiana
Imperial Danby	Vermont
Island Black	Vermont

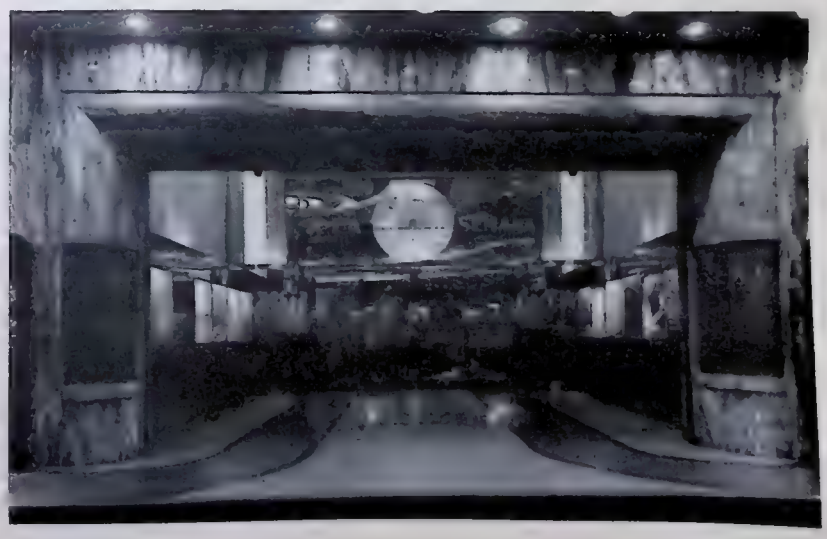
THE GREATEST MARBLE EDIFICE of this century is no doubt the National Gallery, Washington, D. C. (Eggers and Higgins, Architects). To retain this brilliance through the years does not permit neglect.

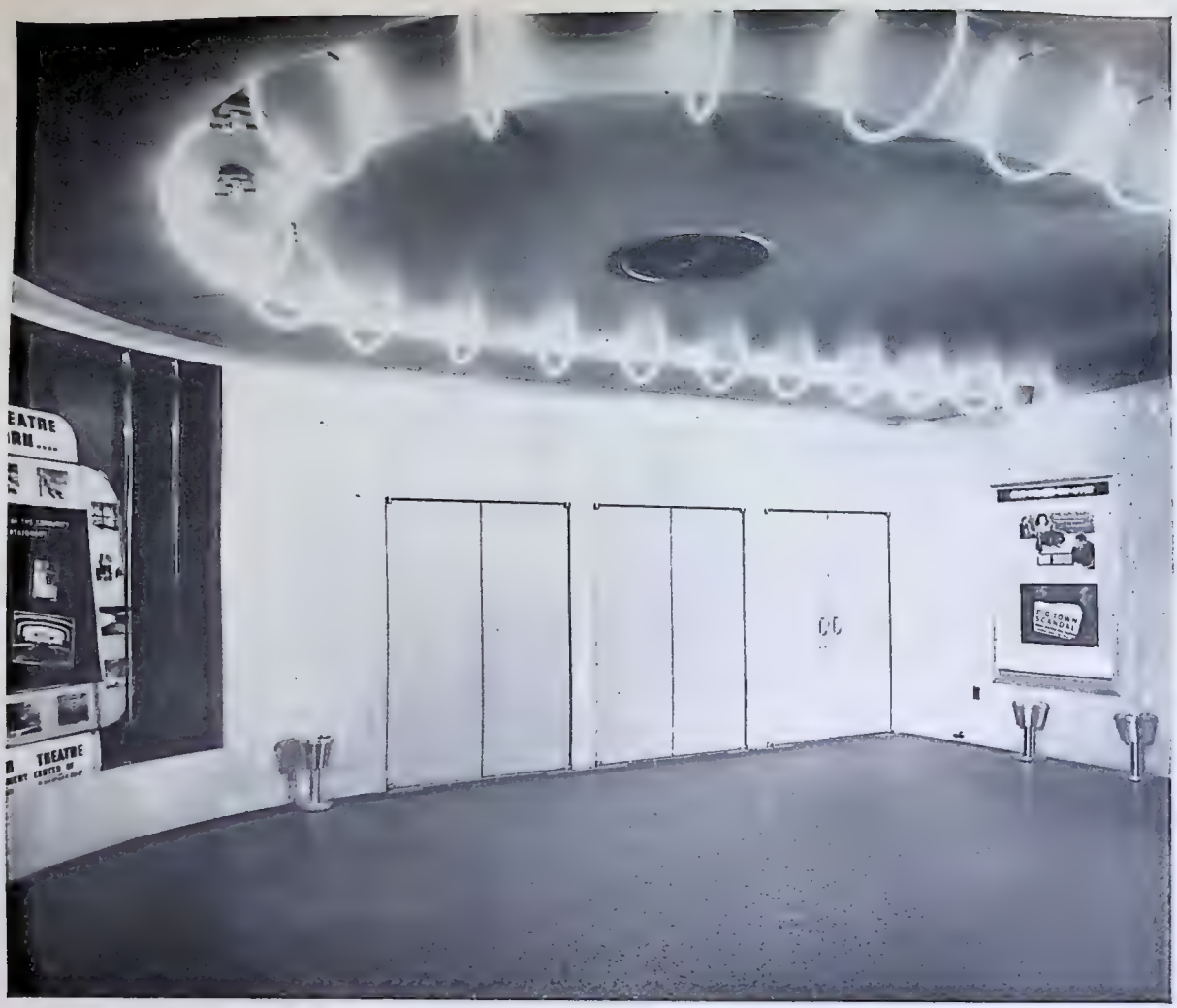




Lawson Gray	Tennessee
Light Cloud	Vermont
Light Vein	Vermont
Listavena	Vermont
Madre Clouded	Alabama
Madre Cream	Alabama
Mankato Buff	Minnesota
Mankato Gray	Minnesota
Marmor Pink	Tennessee
Meade Pink	Tennessee
Metawee	Vermont
Mezzotint	Georgia
Napoleon Gray	Missouri
Napoleon Gray Fleuri	Missouri
Neshobe Gray	Vermont
Olivo	Vermont
Ozark Fleuri	Missouri
Ozark Gray Veined	Missouri
Ozark Tavernelle	Missouri
Pearl Gray	Tennessee
Pink Buff Kasota Fleuri	Minnesota
Pink Buff Kasota Veine	Minnesota
Quaker Gray	Tennessee
Radio Black	Vermont
Regal Danby	Vermont
Rochelle	Tennessee
Rose Gray	Tennessee
Rosemont	Tennessee
Ross Gray	Tennessee

ABOVE: MARBLE FRONTS offer a long-lasting theatrical effect. The Dabel, Dayton, Ohio, features a display panel of green-veined white Georgian marble with a cream terra cotta trim, while a base of black marble is picked up in a display spot high on the facia. F & Y Building Service of Columbus designed and constructed. **BELOW:** The front of the Rex and Duplex, Havana, Cuba, is resplendent in a marble arch.





ABOVE: MARBLE PROVIDES the luster of richness and a minimum of maintenance or repair worries in the lobby of the Mancuso, Batavia, N. Y. (Michael DeAngelis, Architect). BELOW: Etched glass murals and mirrored panels combine with the lustrous quality of black marble and wall-to-wall carpeting in the lobby of the Skouras' State, Jersey City, N. J., which was remodeled under the direction of Jules Catsiff.



Ross Pink	Tennessee
Royal Antique	Vermont
Selected Cream	Alabama
Silvestre	Vermont
Standard White	Vermont
Statuary Vein	Italy
Striped Brocadillo	Vermont
Temain Gray	Tennessee
Temain Pink	Tennessee
Temain Rose	Tennessee
Veined Cedar	Tennessee
Veined Champion	Tennessee
Veined Dark Cedar	Tennessee
Verdoso	Vermont
Vermont Pavonazzo	Vermont
Westland Cippolino	Vermont
Westland Cream Dark	Vermont
Westland Cream Veined Dark	Vermont
Westland Green Veined Cream	Vermont
White Cherokee	Georgia
White Georgia	Georgia
Yule Colorado Golden Vein	Colorado

Group B

This category includes marbles and stones similar in character to the preceding group, but with working qualities somewhat less favorable. There are occasional natural faults, and some waxing and sticking is necessary.

The following comprise Group B:

Antique Rose	Tennessee
Arabescato	Italy
Aurisina	Trieste
Bardiglio Costaccia	Italy
Belgian Black	Belgium
Brosonora	Tennessee
Buffneato	Trieste
Candoro Buff	Tennessee
Champville	France
Cremo	Italy
Dark Plattin	Arkansas
French Pink (Granox)	Tennessee
Gris des Ardennes	Belgium
Imperial Black	Tennessee
Iroquois Buff	Indiana
Light Plattin	Arkansas
Madre Veined #1	Alabama
Madre Veined #2	Alabama
Mankato Cream	Minnesota
Mankato Pink Buff	Minnesota
Norte Travertine	Argentine
Ozark Famosa	Arkansas
Prunelli Rose	Italy
Rincon Travertine	Argentine
Roman Travertine	Italy
Rose Aurora	Portugal
Rouge Byzantin	Belgium
Rouge de Rance	Belgium
Rouge Rose	Belgium
Rouge Royal	Belgium
Royal Gray	Belgium
Serpentine Scuro	Italy
Silvertone Black	Canada
Special Gray	Tennessee
Statuary Golden Vein	Italy
Ste. Anne	Belgium
St. Clair	Arkansas
St. Eduard	Belgium
St. Florient Rose	Portugal
Veined Cream	Alabama

Group C

Under this heading come marbles and stones of uncertain variation in working qualities; geological flaws, voids, veins, and lines of separation common; standard shop practice to repair Nature's variations by sticking, waxing, and filling; liners and other forms of reinforcement freely employed when necessary.

The following is a listing of marbles in this classification:

Adorado	Missouri
Bardiglio Fiorito	Italy
Bardiglio Tigrato	Italy
Belgian Grand Antique Gris	Belgium
Biegenelle	Trieste
Bois Jourdain	France
Botticino	Italy
Breche de Salernes	France
Breche Opal	France
Breche Stazzema	Italy
Bronzetto	Italy
Campania Rose	Tennessee
Campania Vert	Tennessee
Colocreme Travertine	Colorado
Colorosa Travertine	Colorado
Comblanchien	France
Coral Rose	Tennessee
Corallo Rosa	Italy
Coral Rouge Fleuri	Tennessee
Domestic Fleuri	Tennessee
d'Or Fossile	Tennessee
Eldorado	Missouri
Escalette	France
Fleuri	Tennessee
Fior de Pesco Carnico	Italy
Gradorado	Missouri
Gramosa	Tennessee
Graymole	France
Hauteville	France
Hondorado	Missouri
Indorado	Missouri
Istrian Nuage	Italy
Jasper	Vermont
Jaune de Brignoles	France
Jaune de Provence	France
Languedoc	France
Lunel—Fleuri, Fonce, Uni	France
Mankato Pink	Minnesota
Mouchette	France
Montenelle	Trieste
Napoleon Grand Melange	France
Notre Dame A & B	France
Oriental	Vermont
Ozark Rouge	Arkansas
Peruvian Golden Travertine	Peru
Phantasia Rose	Tennessee
Phantasia Vert	Tennessee
Piastraccia	Italy
Primavera	Italy
Red Antique of Italy	Italy
Red Levanto (all types)	Italy
Red Rubino	Italy
Red Verona (all types)	Italy
Roble Travertine	Argentine
Rosato	Italy
Rose	Tennessee
Rose de Brignoles	France
Roseal	Tennessee
Roman Breche	France
Rosso Magnaboschi	Italy
Rosso Verona Alberato	Italy
Rouge Damask	Italy
Rouge Griotte	Belgium
Rouge de Neuville Griotte	Belgium
Rouge de Neuville Royal	Belgium
Royal Fleuri	Tennessee
Serpentine Silvery Green	Italy
Sheldorado	Missouri
St. Boniface	Tennessee
Ste. Anne Rubane	Belgium
Tavernelle (all types)	Italy
Tobas Travertine	Argentine
Traniville	Italy
Valcinero	Germany
Verde Antique	Maryland
Verde Antique	Vermont
Verde d'Italia	Italy
Verde Floran	Italy
Verdona	Italy
Vert d'Issorie (all types)	Italy
Vert Imperial	Italy
Wallen Gray	Germany
Westfield Green	Massachusetts
Yellow Verona	Italy

Group D

This category includes marbles and stones similar to those in Group C and are subject to the same methods of finishing and manufacture; they contain, however, a larger proportion of natural faults, and a maximum variation in working qualities; this group comprises many of the highly colored marbles noted for their decorative qualities.

The following are recognized as marbles coming within the definition of the Group D classification:

Alps Green	Italy
Apache Gold	Arizona
Black and Gold	Italy
Bleu Belge	Belgium
Breche Oriental	France
Breche Violet	Italy
Cassino Rose	Italy
Crema Roseada	Italy
Crema Verteada	Italy
Crocidolite	Italy
Etruscan Grand Antique	Italy
Famosa (all types)	Germany
Fiamme de Plesio	Italy
Fleur de Peche	Italy
Florido Cream	Spain
Florido Rose	Spain
Forest Green	Italy
French Grand Antique	France
Geronimo	Arizona
Incarnat	Portugal
Italian Grand Antique	Italy
Loredo Chiaro	Italy
Loredo Rosato	Italy

DECORATIVE RESULT of interestingly figured marble in areas where a long lasting, easy to maintain surface is desired, is here shown in the outer lobby of Sidney Lust's Cheverly, Cheverly, Md., (John and Drew Eberson, Architects). Combined with Formica doors, tile floors, and stainless steel poster cases, the result is modern and compelling, and will remain that way without a large cleaning overhead.





CONTRASTING TYPES of marble set off the poster cases and candy bar in the Milford, Milford, Del., (John and Drew Eberson, Architects). Here again maintenance will be simple and inexpensive if subject to a regular routine and good quality, properly selected materials. Marble produces its own stamp of quality on any building, and this the patron will recognize and accept in a modern theatre structure.

Navajo Black and Gold	Arizona
Paonazzo	Italy
Pedrara Onyx	Mexico
Renfrew	England
Rojo Alicante	Spain
Rose Perle	Portugal
Rosora	Italy
Rouge Antique	France
Rouge de Vitrolles	France
Rouge Jascolin	Italy
Siena (all types)	Italy
Tuscan Rose	Italy
Verde Antico d'Italia	Italy
Vert Issogne	Italy
Vert Maurin	France
Vert St. Denis	Italy
Viola Antico	Italy

It should be noted carefully that the four groups defined above have no reference whatsoever to comparative merit or value. If proper methods of manufacture are employed, all these materials, regardless of classification, are considered to be of substantially equal performance, durability, or utility, with respect to the particular purpose for which they are recommended. The classifications merely indicate what is deemed to be proper and acceptable in each instance, as based on trade usage. Some discretion must be exercised in selection, depending upon conditions the marble in question will meet.

In addition, while the characteristics of various marbles are important in connection with the finishing process, they are not essentially indicative of relative excellence and do not interfere with building installation. Only with Groups C and D is an exception made: the setting space and the thickness should be increased if necessary, provided liners are required for reinforcement.

ASPECTS OF INTERIOR MARBLE USE

When making installations of marble in theatres and other buildings, there are certain factors which must be considered to bring out the best qualities of the marble both as regards appearance and durability. Once an installation has been made which is proper from every point of view, periodic maintenance is all that is required to preserve marble's gracious effects.

Surface Finishes

A sand rubbed or wet sand finish is a smooth surface produced on a cast iron rubbing bed with sand and water and is used for treads, saddles (thresholds), platforms and floors; and on floors by surfacing operation after setting.

A grit finish, a smooth, dull finish between sand and hone produced by grits, is also used for treads, saddles (thresholds), platforms and floors.

A hone or egg shell finish is a dull gloss surface which gives relatively little reflection of light. It is produced by a natural hone, hand work, or machine. It is used for treads, floors, and standing marble.

A polish finish, generally used for standing marble, is a gloss surface that will reflect light and emphasize the color and marking of the material. It is produced by a buffer with putty applied to a honed surface.

Thicknesses

Unless architectural drawings decree otherwise, the standard thickness for marble, where only one face is finished, is commonly accepted by the trade to be ⅞" from the saw. The actual finishing processes will reduce any thickness only slightly.

Commercial floor tiles are in the neighborhood of ⅞" thick and come in the standard sizes 8"x6", 12"x12", and 10"x20". They are generally supplied 1/32" scant of the standard nominal size in each dimension so as to produce the usual 1/16" joint when laid in the floor. Other sizes are considered as floor slabs. When a pattern floor is designed, the various varieties of marble chosen should have similar wear characteristics.

As far as molded work is concerned, the minimum thickness at the thinnest point of the mold should be ⅞". Naturally, this minimum thickness will be increased if the width or height of the molded work under consideration so requires.

In cases where thicker marble slabs are required, such as counters and sanitary partitions, approximate thicknesses of 1¼", 1½", and 2" are available. Intermediate thicknesses should be avoided wherever possible because of their greater disproportionate cost. Accurate determination of these thicknesses and other measurements beforehand will hasten construction immeasurably, as well as reducing costs and errors.

Setting Materials

Among the several setting materials used by the marble trade, Plaster of Paris is frequently used as a backing for standing marble. Ashlar work and smaller pieces usually only require application of this material around location of the anchors. Larger pieces, however, such as wall panels, usually need Plaster of Paris applied between the top and bottom joints, in addition to those around the anchors.

Since Plaster of Paris is soluble in the presence of moisture, it is not suitable for spotting or jointing an exterior veneer, in shower stalls, or other places where dampness is likely to be present. In view of this shortcoming, therefore, Portland cement with a shrinkage reducing accelerator may be substituted for Plaster of Paris, for it will resist the inroads of moisture.

Especially desirable where setting space is tight or at points where anchoring is beset by difficulties, plasticized synthetic resin bonding cement is a black or dark mastic material. It is impervious to moisture, unaffected by heat or cold, and adheres strongly to clean surfaces without sagging. It sets to a stiff plastic state which is neither brittle nor hard, but which is capable of absorbing moderate shock or settlement. This cement is also said to eliminate

damage to wall backing and expense of spoilage of marble drilling.

Elastic non-staining pointing and caulking mastics may now be secured which are compounded to combine both long plastic life and non-staining characteristics. The mastics are strongly recommended for buttering joints of thin marble, exterior veneer or ashlar, interior shower stalls, etc. Red and black non-staining mastics are also available for use on dark decorative marbles.

Plastic or aluminum cushions, which are available in 1/16", 1/8" and 3/16" sizes, are advised for the maintenance of uniform joints in marble assembled with non-staining mastic where the weight of the marble might possibly force the mastic out of the joint. Wood or lead cushions should never be used on light colored marble because they may stain.

To prevent the transmission of moisture through marble floor surfacing concrete slabs should be densified and made resistant to water by means of integral waterproofing.

CLEAN WATER and clean rags, applied often enough that the marble never becomes soiled or stained, is the ideal maintenance procedure.



Other Setting Suggestions

In most installations the setting space (the distance from the rough wall backing to the finished face of the marble) should be a minimum of 1½". Where reinforcing liners are required, however, a setting space of at least 2½" should be allowed. Concealed anchors and dowels should be of copper, brass, or aluminum wire approximately 1/8" in diameter. Joints must be fully buttered with the joint material, colored, if specified. Superficial pointing of joints, once installation has been made, has not proven to be satisfactory.

Ceiling marble, which must be supported by special anchors, requires a minimum space of 3" back of the marble. Care should be taken to provide enough and sufficiently heavy anchors and supports to prevent sagging. Furthermore, plaster work above the marble should be placed before installation actually starts, and the marble should not under any circumstances be set directly against unpainted structural steel, piping, reinforcing, etc. Finally, in the matter of toilet and shower room construction, only hardware necessary for the erection of the marble, such as chromium-plated brass or any other non-staining metal, should be included in the marble specifications.

External Corners

It is general practice to use butt joints on external corners, unless, of course, there exists a special reason for specifying otherwise. In other words, the exposed return of the member should be the accepted or specified thickness of the member.

Although another method, known as the "quick mitre joint," may be used to treat external corners, particularly in cases where the minimum thickness of marble is all that is required, it involves more labor and must be clearly specified when desired. This method is not recommended for base, since it forms an unsanitary internal angle at the floor with more danger of chippage also. Butt joints are by far preferable where members extend to the floor.

Non-Slip Inserts and Nosings

Technological advances within the industry have now made it possible to install, either on new work in the marble contractor's plant or at the site on old work, non-slip inserts and nosings or overall applications of non-slip material. These materials will aid in preventing undue wear on stair treads, ramps, and other important places as well as reducing slip hazards.

THE CARE AND CLEANING OF MARBLE

In spite of the fact that marble is universally recognized as having practically no counterpart in beauty of color and markings, character, performance, and low maintenance cost, there is all too little appreciation of the fact that marble, once installed, must be accorded regular periodic care and cleaning to insure retention of its original beauty. Although dirt and grime will not impair its life span, they will mar its appearance to a great degree.

Two possible reasons for the seemingly widespread false impression that marble can go without attention may lie in a general lack of knowledge about proper marble cleaning methods, coupled with the erroneous belief that the cleaning of marble is an extremely costly operation. As a matter of fact, quite the contrary is true. Proper and consistent cleaning methods from the start involve no great expense and will keep marble right up to par in appearance.

Polished Interior Marble

A mild alkaline soluble cleaner or soapless cleaner of the non-precipitating type, which contains no grease, lye, or other corrosive fillers, has been found by experience to be best for cleaning polished interior marble (previously defined). It is imperative that the cleaner be one that rinses freely, even in hard water, and one that does not leave a greasy or slippery film to catch and hold dirt, discolor, or scratch.

The marble should first be wet thoroughly with clean, clear, hot water. Wash the surface with a solution of one heaping teaspoonful of alkaline soluble cleaner to one gallon of hot water, or as directed. Rinse thoroughly with clean water and wipe dry with soft clean rags to avoid streaking.

Easier rinsing will result if the surface of the marble is wet first, thereby saving cleaning material and preventing any possible injurious action from salts in the cleaner.

Honed Finished Interior Marble

A honed finished piece of interior marble is best cleaned by a mildly alkaline abrasive cleaner which contains no caustic or harsh fillers. It should be one which rinses freely, even in hard water, does not grind or scratch, and does not leave a deposit which will scratch, hold dirt, or discolor. All types of coarse or hard abrasives should be carefully avoided.

After the marble has been thoroughly wetted with clean, clear, hot water, sprinkle the abrasive cleaner on a wet fiber brush and scrub it. Then rinse the marble completely and wipe it dry to avoid streaking.

If the marble has been neglected and further cleaning is indicated, place two pounds, or about one and one half quarts of abrasive cleaner in a 12-14 quart pail, add about four quarts of hot water, stir thoroughly. Fill the pail with water and while stirring constantly apply the mixture to the wet marble with a broad brush in the same manner as white wash. After this has dried on, wet a fiber scrub brush in the same solution, dip into the abrasive powder and scrub vigorously. Wash down the surface with a hose or otherwise rinse with clean water. Wipe dry to avoid streaking.

If only surface discoloration remains, a honed surface may be further honed, while sand finished marble may be sanded or gritted. This can be done with sharp fine sand or artificial abrasive grain and water, rubbed on with a block of stone or metal. Abrasive grain up to 120 grit size should be selected depending on the coarseness of the sand finish and finer sizes of grit or pumice or hone bricks used for smoother finishes.

Sand Finished Floor Marble

Floors, stair treads, platforms and marble subjected to abrasive wear must be mopped or scrubbed regularly and in a manner that will not leave a slippery film. The floor should be wet with clear, clean, hot water. Sprinkle abrasive cleaner sparingly on the floor, or, put two or three handfuls of cleaner directly in the pail of hot water. Scrub or mop, either by hand or machine, with a little water. Rinse thoroughly with clean water and dry with a mop or squeegee.

Care should be taken to keep metal parts of the mop or mechanical equipment from injuring base and risers and also to see that the base is wiped when floors are scrubbed. Dampened white pine sawdust is satisfactory as a sweeping compound. As a final note of caution, avoid the use of oily prepared sweeping compounds or oiled mops on light colored marbles.

Exterior Building Marble

Maintenance suggestions under "Polished Interior Marble" apply to exterior building marble as well. Certain marbles used extensively out of doors, will retain their polish and natural beauty indefinitely simply with systematic cleaning as recommended. Many of the highly colored marbles, however, need special treatment to retain their polish and color, when exposed out of doors.

The following steps are recommended for cleaning exterior marble: the application of light colored waxes at one to three months intervals that will not water spot either in paste form or water emulsion; or covering surfaces annually or at longer intervals with a colorless waterproof lacquer especially designed for bonding to smooth marble surfaces, and with no tendency to yellow. It must not soften in summer or crack in winter cold and must be immune to attack from common cleaners and window cleaning preparations. Waxing or lacquering is not recommended for white marbles unless a creamy effect is desired.

Tooled or Sand Finished Exterior Marble

The mellowing influence of time is a great beautifier of exterior marble. In the process of weathering marble or stone takes on an atmosphere of antiquity and warmth that is greatly desired. Be sure the exterior marble actually needs cleaning and will be improved thereby.

Care and maintenance of all exterior marble or stone construction usually require men trained in the work and who have the necessary equipment. There are in most large cities concerns which specialize in this work. Steam cleaning of marble exteriors is satisfactory if no harmful acid cleaners or injurious alkalis are used. Repointing of watertight joints should be undertaken along with surface cleaning.

Sand blasting is not recommended. It opens up the marble and removes that patina which forms on all seasoned stones as Nature's own preservative. This treatment also tends to remove the pointing of joints between stones.

Do not permit the use of wire brushes. Despite rinsing, minute particles of steel will remain on the stone and cause rusting. Cleaners and stain removers recommended for use on sand finished interior marble may be used successfully.

Cleaning by the Poultice Method

These suggestions apply equally well to sand finished, honed, or polished marble, both interior and exterior. This method is especially applicable to carving and intricate surfaces that are scrubbed with difficulty.

If the marble is especially dirty and discolored through long neglect, a poultice should follow normal cleaning. It is thus possible to draw out deep seated stains and secure a more uniform result than is usual by surface scrubbing.

Mix the abrasive cleaner with hot water, stirring thoroughly with stick or paddle, to form a thick, smooth paste, about the consistency of wet cement or plaster, stiff enough to adhere to the face of the standing marble.

First, wet the surface of the marble as previously recommended. Apply the poultice paste with a plasterer's trowel or wooden spreader to form a uniform thickness of about ½", so as to completely shut off the air from the face of the marble. The poultice should cover the entire area of the marble to be cleaned. Let the poultice remain about 48 hours or until thoroughly dry. If necessary, the marble must be protected so that the poultice will not dry out too rapidly or be washed off by rain prematurely.

When ready to remove the poultice, dampen it slightly to avoid dust; use a wooden paddle to avoid scratches; rinse the stone thoroughly with clean water, being sure that no paste remains; and wipe dry. This paste works best when freshly mixed and applied hot. In severe cases several applications may be necessary to secure best results.

Stain Removal

The treatment of stains on marble is one which must be handled quite independently from cleaning and maintenance. Since stains are difficult to remove if permitted to stand for a long period, they should be treated at once. First of all, the source of the stain must

LEFT: AFTER LONG NEGLECT the poultice method is the Court of Last Resort and it usually does the trick. RIGHT: Removal of the poultice detergent shows that it worked this time. This is not an infallible method but is worth trying whenever marble has been neglected.





CARVED AND INTRICATE surfaces that are difficult to scrub are easy to poultice. Here is a pilaster with poultice removed and still in place.

be removed. Before treatment it is important to wet the area around the stain to halt the spread of cleaners with staining material and to prevent a stain ring.

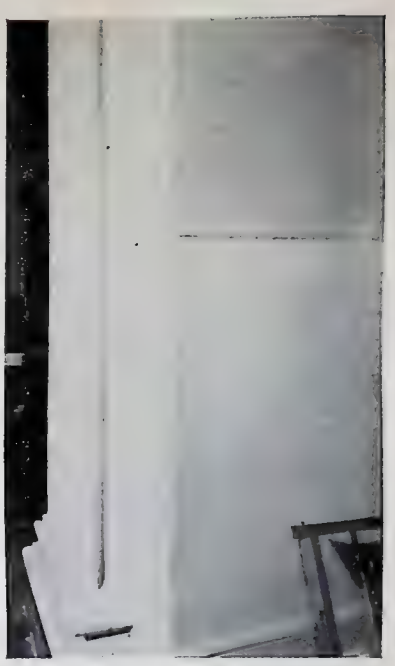
Marble stains generally fall into three distinct categories: organic (requiring an oxidizing or bleaching agent), metallic (requiring a reducing agent), and oils (requiring a solvent).

Organic stains, caused by lumber, wood floors, excelsior, leaves, bark, flowers, paper, bird droppings, or anything else of an organic nature may cause pinkish brown stains on light colored marble in the presence of moisture. If the marble in question is outdoors, the normal action of sun and rain will clear up stains and obviate the necessity for other treatment. Indoor marble, or outdoor marble whose refurbishing must be hastened, however, should be treated with Javelle Water or Hydrogen Peroxide, applied either as a wash or as a poultice with whiting or white blotting paper. If hydrogen peroxide is employed as a poultice, household ammonia should be added to initiate the reaction. Tobacco stains will generally lend themselves to this treatment also.

Javelle Water may usually be purchased at drug stores, but it is often more satisfactory to make it as occasion demands. One procedure for making Javelle Water is as follows:

Put one pound of washing soda in an enameled or agate pan (never an aluminum one) and add one quart of boiling water. Then in a similar utensil put one half pound of chloride of lime and add to it two quarts of cold water. Stir this mixture and let stand several hours, preferably over night. Skim off the top of the liquid carefully and pour only clear liquid into the soda solution. Stir the curdy solution and let stand. Pour the clear liquid that forms, into bottles and discard the white precipitate. Label and store in dark place.

Ordinary hydrogen peroxide in 17 to 20 volume, sold at most drug stores as "hair bleach," may be used to make a bleach for marble cleaning purposes. Apply to the stained area by dropper or careful pouring, and add a few drops of household ammonia. On vertical surfaces apply as a poultice with whiting and add ammonia after the poultice is



SAME PILASTER showing the front after a thorough cleaning with a poultice, as contrasted to the side that has not yet been properly cleaned.

in place. When bubbling ceases, remove and wash thoroughly. Although higher concentrations of hydrogen peroxide will work faster, special precautions are required in use.

Lastly, in the category of organic stains, those affecting urinals can be safeguarded against by scattering an abrasive cleaner around the urinal or water closet and leaving it over night. If there is a stain due to neglect, use

AFTER YEARS of neglect marble can usually be returned to its original beauty and lustre with proper cleaning methods. It should then be kept that way.



the poultice method described above with the possible addition of a bleaching agent. Iodine stains should disappear of their own accord, but, if action must be hastened, a poultice of alcohol or whiting may be applied.

Metallic stains from iron and steel will have the appearance of rust. They may come from concealed structural steel (if moisture is present), from concealed steel anchors or dowels, flag pole or awning fixtures, dripping steel pipes, metal flower or flag holders, wreath forms, etc. First, remove the source of the stain or protectively paint the metallic object to prevent oxidation.

A fresh stain may be so superficial on a smooth finish that it can be removed by vigorous rubbing. A slight scratching or abrasive rubbing may clear up the rough surface. If these fail, apply a reducing agent in accordance with the directions on the package.

Copper and bronze stains occur where there is any run off from copper or bronze and the stains are usually greenish or muddy brown in color. There is little use in attempting to remove the discoloration while the source remains. It is suggested that the back of all bronze tablets, etc., be painted with nonstaining quick drying paint before installation and that the exposed surfaces of the bronze be kept waxed or coated with lacquer.

For such stains in marble, mix together, in the dry form, one part of ammonium chloride (sal ammoniac) and four parts of whiting or powdered talc. Add ammonia water and stir until a thick paste is obtained. Place this poultice over an area larger than the actual stain, to prevent spread of stain, and leave until dry. Remove with wooden paddle, rinse thoroughly and repeat if necessary.

Lead stains are bright yellow or orange and may appear at a considerable distance from the concealed lead. There is no use in attempting to remove stains while the source of the stain remains. If present as cushions in a joint the lead can be sawed and raked out. When the source is removed, the stain will disappear of its own accord through atmospheric action.

Ink stains may be removed by first removing all surface ink and then covering the ink spot with a blotter soaked with alcohol, followed by another blotter soaked in ammonia. As a final step, bleach the remaining color with bleaching powders. Some inks are metallic in nature and may be removed by reducing agents.

Oil and grease stains are usually light brown or yellow in color with the center darkest and can usually be removed by the proper use of a solvent such as acetone and amyl acetate in equal parts. Be sure the source of the stain is removed. Saturate clean cloth, white blotting paper or make a poultice with whiting and solvent. Apply over a larger area than the stain and leave until dry. Rinse thoroughly and repeat if necessary.

Paint should be removed from marble as soon as possible, using a razor blade or knife edge. Protect lower marble of vertical installations from run off. There are two methods of stain removal from this source:



THE BIG, NEW ODEON, Toronto, Canada, is tastefully dressed in marble and stainless steel under its imposing marquee and around its glass doors. Marble is an ideal surfacing material for the theatre.

(1) Apply benzol as a ½" thick whiting poultice to an area larger than the stain itself. When dry, remove and bleach remaining color with hydrogen peroxide. Rinse and repeat as required.

(2) Apply varnish or paint remover (liquid or paste) over stained area. Remove and scrub with fiber brush. Bleach remaining color with hydrogen peroxide and use oil solvent for any remaining oil stain.

Perspiration stains should clear up with the use of oil solvent, followed if necessary with hydrogen peroxide.

Linseed oil stains may come from the unwise use of oil paints or putty in conjunction with marble. If these have become oxidized they will be difficult to remove. Use oil solvent, followed if necessary with hydrogen peroxide.

Miscellaneous Cleaning Precautions

One of the most important missteps to be avoided in the cleaning of marble involves the use of acid for cleaning. It will destroy polish and eventually result in a "burn", discoloration, and disintegration. By the same token, scouring bricks and harsh abrasives will destroy polish and mar smooth finishes.

Secondly, do not use bar, powder or liquid soaps, lye or caustic cleaners on marble. When used with hard water, particularly, they form insoluble deposits which accumulate on the surface of the marble, are not readily rinsable, discolor, and may well become a slip hazard on floors when wet.

Other precautions to be taken when cleaning marble are: oily sweeping compounds may discolor light colored marbles; do not clean with dirty water and dirty utensils; light colored marbles may be discolored by continued use of ammonia in cleaning, and so-called "lightning" cleaners are likely to be acid in their action and sacrifice the life and finish of the marble in favor of immediate results.

ACKNOWLEDGMENT: In the assembling and preparation of much of the above data, due credit and appreciation is extended to the Marble Institute of America, Inc., 108 Forster Avenue, Mount Vernon, N. Y.

GLASS MIRRORS AND MARBLE are good companions in modern decor. Here is another view of the Skouras' State, Jersey City, where extensive remodeling has produced some dramatic effects.



Speed-Drying Moisture In New Building, Remodeling and Repairs

Infrared Lamps Shorten Drying Waiting Periods And Thereby Save Costly Lost Time and Revenue

INTRODUCTION

One of the most creditable yardsticks by which progress is measured is the finding of new uses for already existent products or processes. Infrared heat has been used extensively for some years in Detroit's mammoth automobile factories to dry rapidly coats of paint freshly applied to car bodies, and by doing up this finishing process in such short order has enabled the assembly line production method to maintain its extraordinary rapidity. Due to its remarkable powers of penetration and the high temperatures it reaches, infrared heat has dried out in a matter of moments paint which would ordinarily require days.

It was not until comparatively recently, however, that a Cleveland architectural designer, W. A. Popp, first conceived the idea of applying the marvelous drying powers of infrared to the building field. Since the remodeling of two floors in a downtown Cleveland office building was lagging considerably behind schedule, thereby costing the firm waiting to move in from another building dual rent, speeding up completion of the job was imperative. This necessity prompted Popp's design of an infrared dryer for the plaster.

Two simple drying panels, each consisting of twenty-five 250 watt infrared lamps, mounted on a six by six-foot tilting board, wired in two circuits, and fed by 220 volts were constructed. The tilting action allowed for ceiling drying, and swivel-type casters provided mobile flexibility. A square D switch was mounted on the back of the panel for control, and the light board was supported by two wood uprights, bolted to a frame two by six feet in size.

The scratch and brown plaster coats were applied and allowed to set over night. The next day the white coat was trowelled and the dryer turned on as soon as the plasterers moved away. The lamps were placed approximately a foot away from the wet plaster. The steam, caused by the heat striking the moisture, was blown away by a relay of large fans so that the heat could continue to penetrate the plaster. After a day and a night of application with each bank covering approximately 60 square feet at a time, enough plaster had been dried to allow the painters to prime coat. The paint foreman then took over and pushed the dryers ahead to the next areas to be dried. The outstanding feature of this first successful use of infrared heat in the building field lies in the fact that the speed-up in plaster drying resulted in a direct saving of over $3,000 with two units which cost together only $200 or so to construct.

BRIEF: *A theatre with closed doors is also a theatre with a closed boxoffice . . . When a showplace is shut up . . . be it a still-unopened new project or an old house undergoing remodeling or repairs . . . there is no cash going into the safe . . . Much of this lost revenue is due to delays enforced by waiting for moisture to dry out . . . in such places as newly plastered walls or shampooed carpets and upholstery . . . Each of these periods of idleness costs the theatre an untold number of patron dollars.*

Infrared heat . . . which has already proven its worth in speeding up the drying process in modern manufacturing processes . . . seems a practical solution to similar problems in the modern building . . . An inexpensive, home-made battery of infrared lamps . . . mounted on an adjustable panel . . . can dry out moisture in a fraction of the time required by natural evaporization . . . It is conceivable that a plastering job, for example, could be started after the last show at night, dried out by infrared heat, and painted in time for the theatre to open promptly for the matinee the next day . . . without loss of a single bit of business . . . in contrast to the ten-day to two-week shutdown often required.

The following article explains how infrared heat panels can be set up and used to capital advantage by the theatreman . . . who wants to keep the tickets dropping in the doorman's box regularly with little interruption.

THEATRE APPLICATIONS

Just as it proved a godsend to the foregoing office building remodeling project, so infrared heat would seem to be the logical solution to the problem of hastening much of the work involved in new theatre construction or remodeling. As the aforementioned anecdote points out, a saving in time meant a considerable saving in money to the company waiting to occupy its new quarters. By the same token, every exhibition day missed during a theatre construction or remodeling period is a serious loss at the boxoffice. Every theatreman knows that he misses a lot of valuable business every 24 hours he waits for his theatre to open or re-open. Much of this precious time is lost because workmen are unduly delayed by waiting for just such important factors as the drying of plaster before they can proceed further. Furthermore, while it is the outstanding one, shortening of plaster drying time is not the only way in which infrared heat can serve the theatre in practical ways.

Fronts

A bank of infrared lamps could be used to good advantage in drying theatre fronts after they have been painted, thus insuring continued operation. An application of infrared heat might also be of especial value in quickly drying a stucco front prior to painting. Under normal dry conditions,

SPEED DRYING as applied to interior construction and remodeling is an interesting adaptation that promises to speed many a theatre opening. Extensively used in the finishing and painting of many products used in the theatre, there is no reason why it should not serve the theatre building as well.



stucco takes a couple of days to dry, but after a rain of any sort three or four days must pass before it is possible to begin painting. Infrared heat, on the other hand, could probably dry out the wet stucco in half a day so that painting could be initiated promptly.

It is also conceivable that infrared heat could perform yeoman duty at the theatre front in the wintertime by quickly melting ice and snow on the sidewalk, thereby rapidly dispelling the danger of slipping accidents.

Walls, Ceilings, and Floors

As we noted before, plaster drying is one of the prime bugaboos in slowing up completion of a new theatre construction or the reopening of a remodeled one. By use of infrared heat, however, a manager should be able to have plaster laid over wood or metal lath, dried, and painted in a couple of days, whereas normal atmospheric processes would require close to two weeks at least, with the subsequent loss of revenue running into painful figures.

By use of a couple of infrared panels, adjustable so that they could be tilted at any angle, the theatre operator should be able to settle the plaster drying problem with ease. As a matter of fact, the infrared lamp banks could be easily wheeled by members of his staff wherever needed; the manager's prime task would be to see to it that proper ventilation was provided to blow the steam away.

Aside from drying plaster on walls and ceilings, infrared heat could also be used to draw the moisture out of concrete before asphalt tile is laid. It is a known fact that when concrete is set on a floor with wet burlap laid over it, three or four days are often required for the cement to cure. Infrared drying, however, would make it possible to start laying tile in a matter of hours. Similarly, after tile has been laid on floors or walls, as in rest rooms, for example, infrared heat could be used to dry out the caulking between sections.

The infrared process might also be employed to speed up the drying of finishes on wood floors so that they could be walked on that much sooner. A great deal of time is consumed oftentimes in waiting for such floors to dry before carpeting can be placed, so a floor dried in short order would be ready for use before the wielder of the shellac or varnish brush realized it.

Carpets, Upholstery, Drapes

At one time or another every theatre operator has been faced with the necessity of shampooing his floor coverings, upholstered furniture, and auditorium curtains and drapes. Although there are available several shampooing compounds with little moisture content, each of them does contain a certain amount. This means, of course, that time must be allowed after shampooing for the materials cleaned to dry out. Foot traffic, for example, can not be permitted to trample over carpets which are still soggy, for sure soiling would result. In spite of the fact that vacuum cleaners will absorb part of the moisture left after shampooing, there will still be some dampness which must be allowed to dry out. During this waiting period, of course, patrons, and their dollars, must be kept out.

Infrared lamp panels, however, could be used to dry out carpets so rapidly and effectively that there would be no danger of damage inflicted on them or loss of a single day's boxoffice receipts. Of course, in using infrared heat on carpets or upholstery and drapes too, for that matter, extreme caution must be taken not to burn the material. This contingency could be easily avoided by moving the bank of infrared lamps constantly so that there would not be any severe concentration of heat too long in any one spot. In the same way that a sun lamp will burn parts of a man's body if he keeps them exposed to its rays without shifting, so the intense heat generated by a panel of infrared lamps would also singe theatre carpets and fabrics if allowed to play on them for too long. Prudent use of infrared heat could, however, if used properly, work wonders in speeding up the drying process after shampoos have been administered.

Other Uses

Wherever there is drying to be done in the theatre, infrared heat should prove a miracle-worker. If a severe rain storm, for example, should flood the cellar, infrared lamps could be used to soak up the dampness after excess water is removed. In a similar way, this effective drying method might be used to dry out toilet room floors quickly after they have been mopped. Thirdly, this potent type of heat could be employed to hasten the gluing of wood joints in new theatre construction projects.

CONCLUSION

Infrared heat, then, appears to be a ready and inexpensive panacea for all drying problems which inevitably arise to plague the theatreman and his boxoffice take. A panel of lamps is so easy to rig up that anyone able to wield a hammer and run wiring could do so with practically no effort. Once the apparatus had been set up, operation would be so simple that it could be entrusted to the youngest members of the theatre staff, provided they were properly instructed in precautions to be taken when drying carpets, upholstery, and fabrics. The ventilation necessary to blow away steam produced by the heat could be easily supplied by a couple of small fans. When not in use, the unit could safely be stored in the basement in a relatively small space. In any event, the investment of a few dollars in constructing such an infrared heat panel would pay for itself tenfold over and over again. And theatres always have available the 220-volt current source necessary to support a large bank.

THE EQUIPMENT necessary to the accomplishing of speed drying is very simple and inexpensive to construct. Hardly more than a tilt top drawing table on casters, it can be moved about at will to dry anything in a 360° area. The infra-red lamp could overheat, causing fires, so the bank should be attended.





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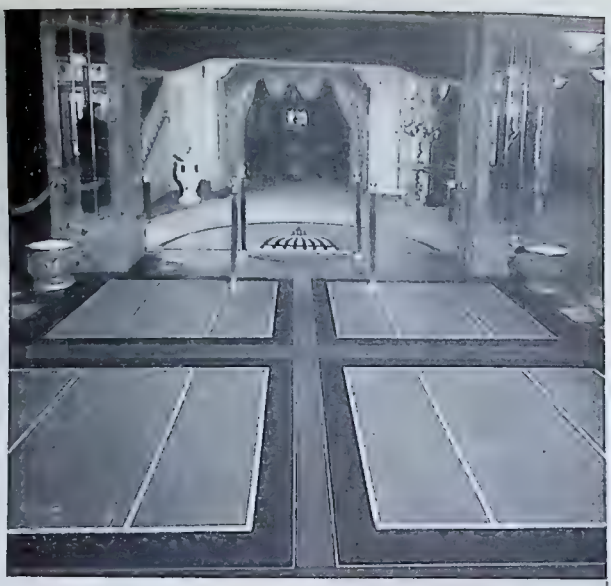
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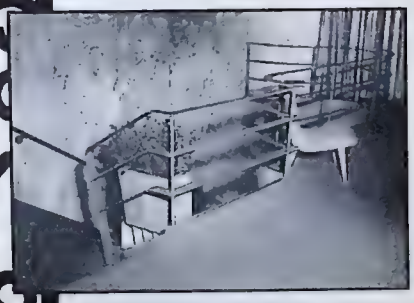
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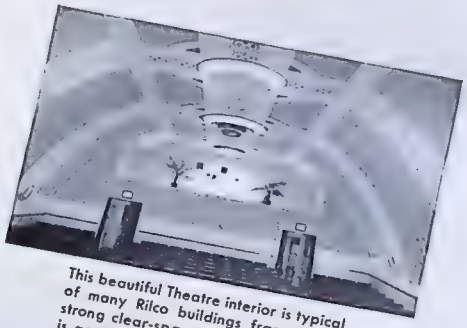
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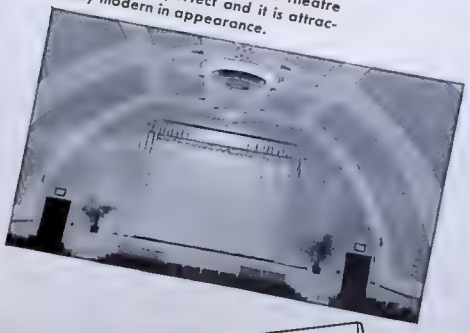
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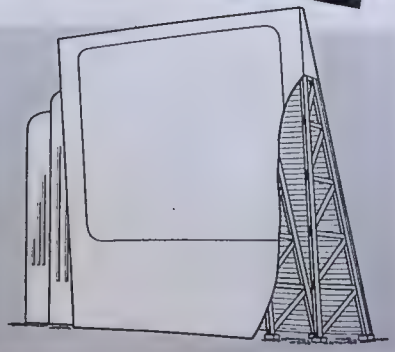
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DRIVE-IN THEATRES

1949-50

Who Are the Drive-In Patrons?

A Metropolitan Area Survey Brings to Light the Feature Traits of the Outdoor Theatre Audience

By Dr. Rodney F. Luther
Sales Consultant and Lecturer in Marketing, University of Minnesota, Minneapolis, Minn.

BRIEF: ***Knowledge of one's self . . . including characteristics, faculties, potentialities, and shortcomings . . . has been pointed to for generations as a fundamental requisite for assured success in the world . . . Every young man . . . who wants to avoid pitfalls and achieve success in business . . . must know before he embarks on his venture exactly what his good and bad points are and guide himself accordingly . . . Moreover, he must constantly remain a student of himself throughout life . . . in order that he may turn his talents into paths which will prove profitable.***

In its phenomenal growth from infancy to maturity, the drive-in theatre . . . unfortunately . . . has had little time to examine itself . . . The time has come, however, when the drive-in must pause to take stock of itself . . . if it is to be assured a long and prosperous life . . . Although the exciting process of "growing up" is still continuing, it behooves the outdoor theatre to proceed more cautiously now . . . lest it grow out of proportion in certain areas, fail to cater to the tastes of its true patron backbone, or neglect to recognize the intrinsic preferences of its supporters.

The following survey . . . conducted in the densely populated Minneapolis-St. Paul area . . . uncovers some interesting . . . and little recognized . . . facts about the size, ages, habits, likes and dislikes of a typical drive-in audience . . . The findings and conclusions revealed herein should prove tasty food for thought on the part of many operators . . . who are interested in getting better acquainted with the people on whose satisfaction their success hinges . . . What they learn is sure to pay off at the boxoffice.

The Minneapolis-St. Paul marketing area contains a population of over 1,000,000 people, and an area of approximately 500 square miles; it thus ranks as one of the largest population centers in the U. S. This area, commonly called the Twin Cities, is served by five suburban, subsequent-run drive-in theatres, the patrons of which were personally interviewed by a staff of ten professional interviewers under the writer's supervision. A total of 1,624 interviews were conducted at these theatres on various days of the week during the month of August 15 to September 15, 1949. The objective of the survey was to discover, in general, various audience characteristics, and in particular, to attempt to measure the extent to which this patronage is derived at the expense of conventional theatres.

PER CAR AUDIENCE

Findings

1. 55% of the cars contained children.
2. 45% of the cars contained only adults (12 years or older).

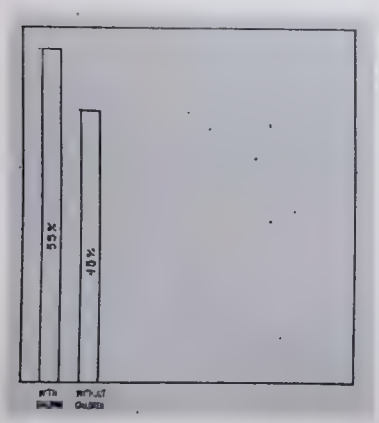


FIGURE No. 1. Average number of cars containing children compared to those without children.

3. There were 2.34 "adults" per car.
4. There were .94 children per car.
5. 25% of the cars contained one child.
6. 19% of the cars contained two children.
7. 7% of the cars contained three children.
8. 2% of the cars contained four children.
9. 2% of the cars contained five or six children.
10. Considering only the 55% of the cars containing children, cars with children averaged 1.77 children per car.

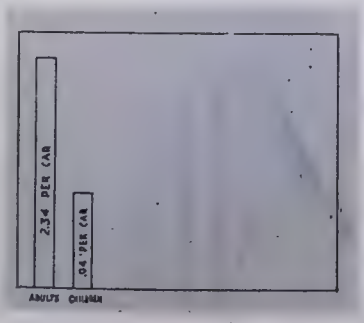


FIGURE No. 2. Average number of adults per car and average number of children per car.

11. From the standpoint of time of performance, there were 1.6 children per car for first performances on weekdays (Monday through Thursday); 1.2 children per car for first performances on week ends (Friday through Sunday); and .57 children per car for second performances.
12. 3.3% of the cars contained one adult.
13. 74% of the cars contained two adults.
14. 10% of the cars contained three adults.
15. 10.5% of the cars contained four adults.
16. 2% of the cars contained five or six adults.
17. From the standpoint of time of performance, there were 2.2 adults per car for first performances on weekdays; 2.27 adults per car for the first performances on week ends; and 2.47 adults per car for the second performances.
18. 10.4% of the adults were estimated to be in the 12-20 age group.

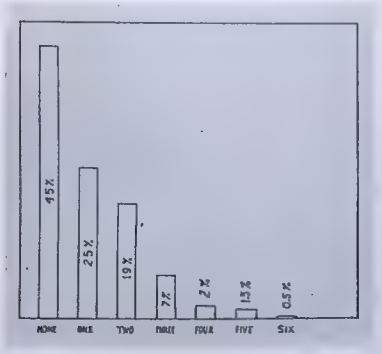


FIGURE No. 3. Percentage range of various numbers of children in cars. As shown in Figure No. 2 the average in all cars was .94 of a child.

19. 48.2% of the adults were estimated to be in the 21-30 age group.
20. 26.7% of the adults were estimated to be in the 31-40 age group.
21. 9.7% of the adults were estimated to be in the 41-50 age group.
22. 5% of the adults were estimated to be in the over 50 age group.

Significance

The average total audience per car was 3.28 persons, comprised of 2.34 adults (age 12 or more) and .94 children. While these data are probably no differ-

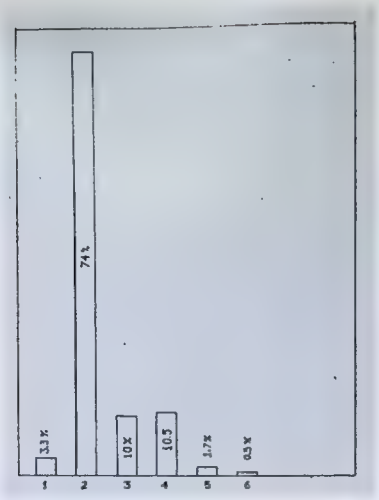


FIGURE No. 4. Percentage range of various numbers of adults in cars. As shown in Figure No. 2 the general average in all cars was 2.34 adults.

ent from those of other drive-in theatres, they do point up the fact that the number of persons who comprise each social or family audience "unit" or group is larger for drive-in theatres than it is for conventional theatres. There is some evidence that patrons of conventional theatres prefer to attend the movies together with one or more friends, who are not typically members of the same immediate family. Conversely, the audience groups found in drive-in theatres are more nearly composed of members of the same family, as evidenced by the presence of an average of 1.77 children in each of the 55% of the cars containing children.

This fact that family groups are predominant is further evidenced by the data regarding the ages of adults in the drive-in audience: over 40% of the audience were estimated to be over 30 years old. Another 50% of the patrons were estimated to be in the 21-30 age group, while only some 10% of the patrons were estimated to be in the 12-20 age group, from which conventional theatres derive possibly 30-40% of their patronage. In other words, over one-half of the cars found at drive-in theatres may reasonably be assumed to contain members of the same family group, the average adults of which, moreover, are significantly older than the average adult patrons of conventional theatres.

From the standpoint of time of performance, these trends become even more pronounced. First performance, weekday patrons were comprised of 2.2 adults, plus 1.6 children per car: clearly these are "family" groups. Week-end, first performance audiences are comprised of 2.3 adults, plus 1.2 children per car; and, on the other hand, second performance audiences are comprised of 2.5 adults plus .6 children per car: more clearly the non-family audience group. The family influence is perhaps also evidenced by the fact that only 5% of the patrons preferred "romances" as a type of picture!

It is interesting to note that while the number of children per car is comparatively variable, the number of adults per car is comparatively constant: 74% of the cars contained two adults.

SOURCE OF PATRONAGE

Findings

1. 27% of the cars came from outside the corporate Twin Cities limits.
2. 73% of the cars came from within the corporate Twin Cities limits.
3. The average patron drove 7.4 miles in order to get to the drive-in theatre.
4. 85% of the cars came from within a 10-mile radius of the theatre.
5. 4.5% of the cars drove more than 20 miles in order to get to the drive-in theatre.
6. From the standpoint of time of performance, patrons for first performances on weekdays lived 6.6 miles from the theatre; patrons for first performances on week ends lived 6.5 miles from the theatre; and patrons for second performances lived 7.6 miles from the theatre.
7. 30% of the patrons went only to drive-in theatres during the summer.

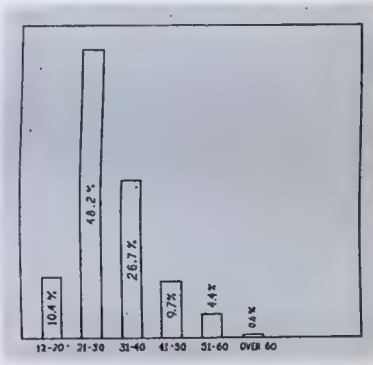


FIGURE No. 5. Approximate age group of adult patrons and the average number in each group.

8. 62% of the patrons went to drive-in theatres for one-half or more of their movies during the summer.
9. 38% of the patrons reported that they attended drive-ins most often.
10. 39% of the patrons reported that they attended neighborhood theatres most often.
11. 14% of the patrons reported that they attended loop, first-run theatres most often.
12. 9% of the patrons reported they attended no particular type of theatre most often.

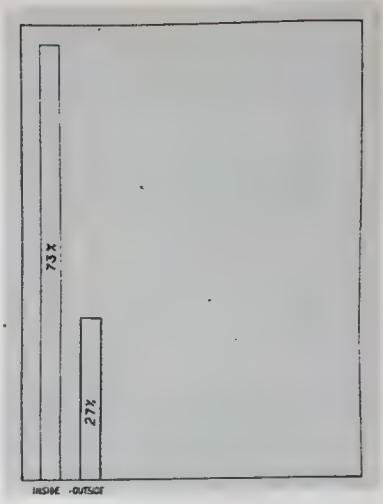


FIGURE No. 6. Source of patronage from inside the neighboring city limits and from the surrounding areas but outside the neighboring city.

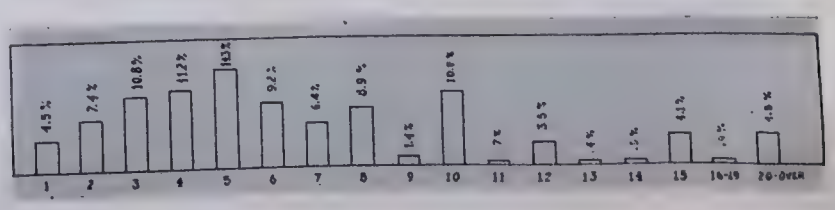
13. 33% said that they usually attend one particular theatre whenever they go to the movies; 67% had no preference for one particular theatre.
14. 3.2% of the patrons had a TV set in their homes.
15. 96.8% of the patrons did not have a TV set in their homes.

Significance

The data concerning the distance which patrons drive in order to attend drive-in theatres indicate the considerable degree of attraction which drive-ins appear to generate among their patrons—patrons who in most cases could attend one, or a number of conventional theatres closer to their homes. The average patron drove 7.4 miles to get to the drive-in theatre of his choice. While 85% of the patrons lived within a ten-mile area, nearly 5% of the patrons drove 20 or more miles (a round trip of over 40 miles) to attend. It cannot be said that these facts, alone, indicate that the drive-in audience is typically a non-conventional-theatre-going group, but such an implication seems quite probable when taken together with data regarding the age and family status of a majority of the patrons and the data regarding theatre preference, product preference, and frequency of patronage.

According to direct responses, 30% of the patrons said that they attend no other type of theatre during the summer, and this percentage becomes 62% if

FIGURE No. 7. Traveling distances in miles from the patron's home, regardless of direction, to the drive-in theatre. Average distance traveled by the average patron was 7.4 miles.



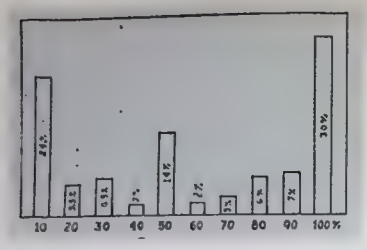


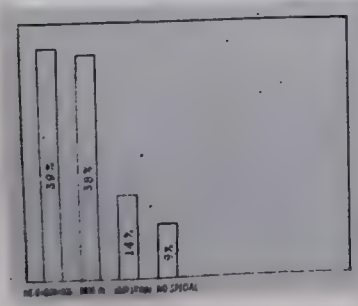
FIGURE No. 8. Preference for drive-in theatres over any other kind, during the summer months, as indicated by percent of attendance at drive-in theatres to percent of total theatre going.

those patrons who attend drive-ins at least one-half or more of the time during the summer are included.

In a further attempt to discover evidence on this matter, patrons were asked which type of theatre they attend most often. Again, 38% of them said that they attended drive-ins most often. 39% said that they attended neighborhood theatres most often, while 14% said they attended loop, first-run theatres most often. From these data it is reasonable to suppose, then, that drive-in theatres do have the patronage of a substantial group of people (30-40% of all patrons) who do not attend (and probably have not in the past) conventional theatres during the summer. The fact that 67% of them evidenced no preference for some particular theatre further suggests that the audience is not composed largely of conventional theatre "fans."

On the other hand, it seems apparent that those patrons who do not attend drive-in theatres most of the time do attend neighborhood theatres. In other words, drive-in theatres which are located in suburban areas and which do not operate on an early-run basis do not appear to be sharing a significant part of their audience with first-run theatres. However, this factor might conceivably change if the drive-ins concerned were to find early runs available to them. The major indication of audience-sharing in the present case, however, appears to be with neigborhood theatres, since 39% of the patrons indicated that they attended neighborhood theatres most often. But of equally great importance is the fact that drive-in theatres do not gain their patronage at the expense of other theatres to nearly the extent that often has been feared.

FIGURE No. 9. Type of theatres attended most often through the year by this surveyed segment.



FREQUENCY OF PATRONAGE

Findings

1. 48.6% of the patrons had not attended any drive-in theatre before this year.
2. The average patron had, however, attended drive-ins 8.7 times during the summer of 1949, and 4.32 times during the summer of 1948.
3. Average monthly attendance at all movies was 4.3 times per month during the summer, and 3.1 times per month during the winter.
4. Comparing movie attendance in 1949 with that of 1948, 23% of the patrons said they now go less often; 45% said they go about as many times; and 32% said that they now attend more frequently.
5. From the standpoint of time of performance, the average monthly attendance of first-performance, weekday patrons was 2.3 times, compared with 2.66 times monthly attendance during the winter; the first-performance, week end patrons' average monthly attendance during the summer was 3.85, compared with 2.8 during the winter; and the second-performance patrons' average monthly attendance was 4.2 times during the summer, compared with 3.5 during the winter.

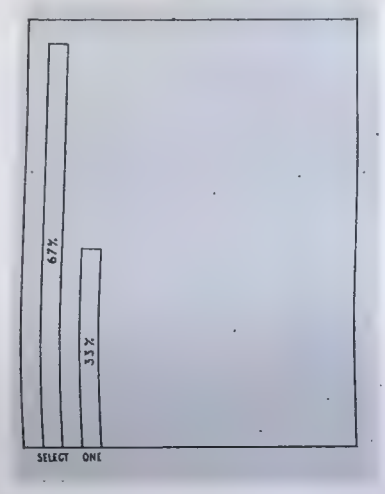


FIGURE No. 10. Constancy to one theatre as compared to a shopping-around selective policy.

Significance

It is interesting to note that while nearly one-half of the patrons interviewed had not attended any drive-in previous to 1949, the average attendance by patrons so far in 1949 had been 8.7 times. Considering that the Minneapolis-St. Paul drive-ins had been operating only some 14 weeks when the survey began, the average patron had attended drive-in theatres over two and one-half times per month in 1949. When questioned regarding the frequency of attendance per summer month, patrons' answers averaged 4.3 times per month—again indicating the substantial attraction offered by drive-in theatres.

It is also significant that drive-in patrons are increasing their movie attendance: 32% of them reported that they attended movies more this year than last year, compared with the 23% who reported less frequent attendance. The clearest proof of the premise that first-performance, weekday patrons (family units) attend drive-in theatres almost exclusively lies in the time of performance data, in which this class of patrons reported that they attended movies only 2.33 times per month. When this is compared with their actual attendance at drive-ins in the summer of 1949, 8.71 times, practically 100% attendance at drive-ins is indicated, if the midpoint of the time during which the survey was conducted is taken as the point of reference. By similar comparisons, week end patrons attended drive-ins 60% of the time, and second performance patrons 54% of the time.

The family groups who patronize drive-ins almost exclusively during the summer months reported that they attended 2.66 movies per month during the winter, which is understandably low in view of the difficulties of attending with children. More surprising is the fact that weekend and second-performance audiences at drive-ins reported higher attendance during the summer than the winter—a fact which is typical in view of the admitted fact that conventional theatre patrons attend more frequently during the winter than during the summer. All of these facts indicate that the drive-in theatre may well attract patrons —whether with children or without—who would not ordinarily attend conventional theatres as frequently or at all.

FIGURE No. 11. A vast majority of these surveyed drive-in patrons did not have television sets in their homes during the summer of 1949.



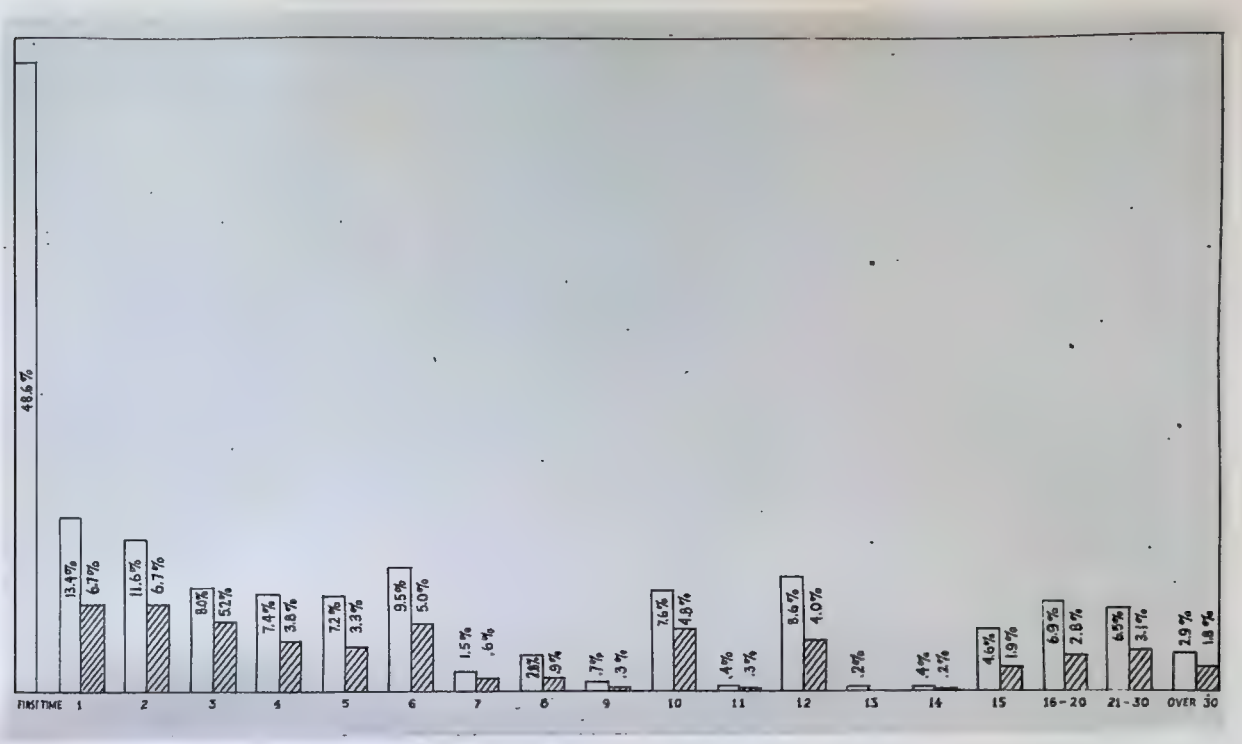


FIGURE No. 12. Percent of patrons attending drive-in theatres during the summer of 1949 as contrasted to during the summer of 1948, broken down into the number of times they attended this type of theatre during each year. General average was 8.7 times in 1949 compared to 4.3 times in 1948.

PRODUCT QUALITY

Findings

1. 17% of the patrons believed that 1949 movies, in comparison with 1948 ones, were not as good; 59% believed that they were about the same; and 24% believed that 1949 movies were better.
2. Comparing the selection of movies available at drive-in theatres with those offered by other types of theatres:
   - 10% of the patrons believed that movies at drive-ins were better.
   - 31% believed that they were about as good.
   - 59% believed that they were not as good and/or older.
3. Comparing the drive-in patrons' preferences for types of movies:
   - 25% of the patrons preferred comedies.
   - 23% of the patrons preferred dramas.
   - 21% of the patrons preferred musicals.
   - 18% of the patrons preferred westerns.
   - 15% of the patrons had no preference.
   - 5% of the patrons preferred romances.

Significance

It is interesting to note that 24% of the patrons believed that 1949 movies, compared with those of 1948, were better. However, 17% believed they were not as good; apparently the quality problem is not yet solved. Also of interest are the preferences for types of movies reported by drive-in patrons. Ranked in the order of preference, they were:

1. Comedies
2. Dramas
3. Musicals
4. Westerns
5. No preference
6. Romances

In other words, the ubiquitous Western picture is surely not the chief interest of drive-in patrons.

But the most important evidence disclosed in this section is the fact that nearly 60% of drive-in patrons believe that the pictures available at drive-ins are not as desirable as those available

FIGURE No. 13. Average number of times per month of attendance at motion picture shows during the Winter (shaded) and during the Summer (white). In this surveyed segment of drive-in theatre patronage, their average attendance during the summer of 1949 was 4.3 times per month, and their average attendance during the winter of 1948-49, when normal theatres were available, was 3.1 times per month.

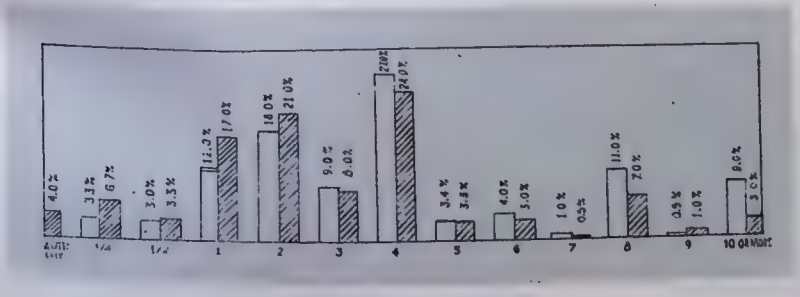
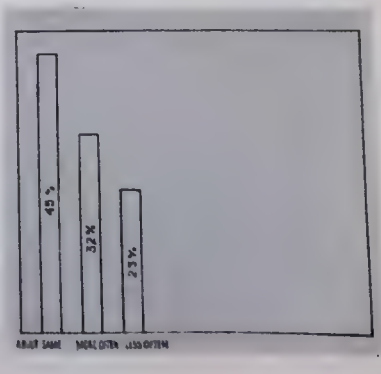


FIGURE No. 14. Attendance at ALL motion pictures during 1949 as compared to during 1948, regardless of the type of theatre attended.



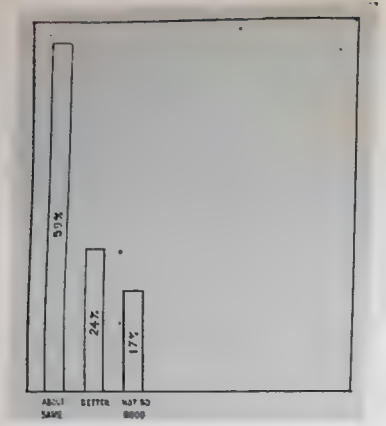


FIGURE No. 15. Contrasting opinions of patrons relative to the quality of 1949's motion pictures as compared to those of the previous year.

at other types of theatres. In other words, patrons are apparently attracted

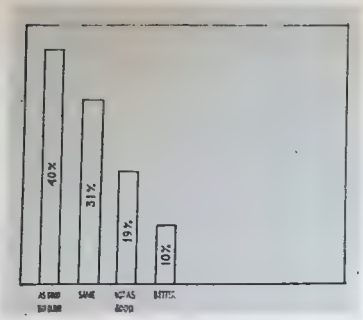


FIGURE No. 16. Opinion of motion pictures shown in drive-in theatres (summer of 1949) as compared to those shown in roofed theatres.

to drive-in theatres, in spite of the fact that the pictures available at drive-ins were not, at least comparatively, as desirable as those ordinarily and regularly available at other types of theatres—theatres which are also closer and presumably more convenient to attend.

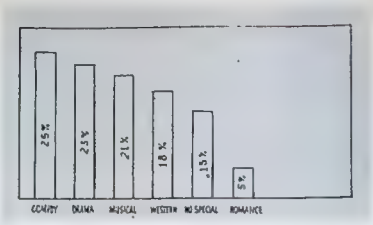


FIGURE No. 17. Drive-in patrons preference for particular types of entertainment.

Disregarding those patrons who may attend drive-in theatres merely because of their novelty, it does seem, accordingly, reasonable to suppose that the drive-in audience is composed of persons who consider this type of theatre as a supplement to, and not a substitute for, conventional theatre attendance. Drive-ins have succeeded in attracting at least a part of the "lost" motion picture audience.

TYPICAL DRIVE-IN PATRONAGE THROUGHOUT THE U.S.A.



AUTOMOBILES of the typical drive-in patron are not necessarily the sleek late models but are "family" cars in a good state of maintenance and repair. At the 675 car Gilmore, Los Angeles, Calif. (above), designed by Architect Wm. Glenn Balch at a cost of $300,000.00, the show is about to begin. Also at the Valley, Ontario, Calif. (below).



CHILDREN are the most powerful drawing card for the drive-in theatre. In these views of the Valley, Ontario, Calif., can be seen the minimum playground facilities that are provided by all modern drive-in theatres. And whether it is the lack of, or expense of, a baby sitter; or the "Please take me!" of the tiny tots; the children are important.





1949-50 Review Of New Drive-In Construction

Pictorially Surveying the Design and Structural Trends in New Drive-Ins that Opened Recently

BRIEF: *While the building boom in drive-in theatres seems to be continuing in most sections of the country . . . and many forecasters now point to the possibility that 3,000 may dot the United States before economic saturation causes a stabilization of that branch of the theatre industry . . . actual functional use . . . and the introduction of many new state codes and ordinances . . . are causing design changes and construction improvements in the more recently constructed ones. . . . In accordance with its policy of pictorially recording all outstanding current theatre construction . . . THEATRE CATALOG is devoting the following 31 pages to a cross-section of the more than 1,000 new drive-ins that have either opened during the past season or will open during the current one.*

Commanding national attention as a brand new motion picture method of entertainment, the drive-in theatres took their place in the spotlight during the 1949-50 season.

From a scattering of enterprises of doubtful moral tone prior to the introduction of the in-car speaker, their appeal to the family unit with special facilities and conveniences for small children, and their elimination of the parking worries attendant to the patronizing of many of the older "main stem" and neighborhood theatres, lifted drive-ins to a major admission-attracting industry branch. Elsewhere in this 8th Annual Edition there are hundreds of thousands of words of history, fact and opinion, much of it never previously organized or published, dealing with the drive-in theatre industry. But a complete understanding can best be gained by a careful study of representative theatres themselves.

In the pages that follow, it should be noted that most new theatres are theatrical in appeal. On the decline are the "cow-pasture" settings, where, although the projection and sound were adequate, there was a lack of the lighting, service, and physical comforts or facilities that the public has come to associate with the modern theatre. It should also be noted that ramps are carefully foundationed with crushed stone and surfaced with gravel, either oil-treated or black topped, so that no pot holes or driving hazards exist; ornamental fencing surrounds a safe, well organized enclosure; and all buildings are well constructed, tastefully arranged and functionally planned.

Restrooms are as well furnished and toilet rooms as well equipped as those in any roofed theatre. Confection stands are clean and well organized to serve good food quickly and appetizingly to all who desire it. Name and attraction signs are vital and dramatic in their show selling. Except for the substitution of the patron's upholstered car for the upholstered theatre chair, here is a theatre.

In many areas the entertainment on the screen is also keeping pace. As the novelty of the drive-in wears off, patron demand for newer and better film attractions becomes insistent. Film distributors are also realizing for the first time that particular drive-ins can roll up important grosses and are demanding high rentals and percentage engagements.

Faced with rentals that are often in excess of those paid by first-run theatres in neighboring towns and cities, drive-in owners are demanding, and often getting, an area first-run for their money.

Another year should see the establishment of more permanent and equitable policies relative to film fare. But the physical structure of the drive-in theatre seems to have solidified. It is a bright, clean and orderly enterprise of the same supervised and high moral tone as the balance of the nation's theatres.

WINSLOW •

Waterville, Me.

A TYPICAL "PACKAGE" STRUCTURE. Even the most economical has a workable plan and adequate facilities. Here at the WINSLOW, Waterville, Me., the ramps are orderly and surfaced with gravel. A triangular, changeable letter attraction board fronts the highway; and sectional fencing creates light baffles at the sides. The screen tower is large and strongly constructed; and a "moonlight" pole provides soft and unobtrusive running lights. Considerable emphasis is laid on the modern facilities of the confection stand and on the conveniences of the toilet rooms. Present are all modern essentials.



REFERENCE DATA

OWNER AND OPERATOR: Lockwood & Gordon Enterprises.
CAR CAPACITY: 700.
SIZE OF LOT: 10 acres.

Changeovers: Weaver Mfg. Co.
In-Car Speakers: The Ballantyne Co.
Lenses: Kollmorgen Optical Corp.
Projection Lamps: Strong Electric Corp.
Projection Machines: The Ballantyne Co. Royal Soundmaster.
Rectifiers: The Ballantyne Co. Lightmaster.
Rewinders: Wenzel Projector Co.
Sign: Hi-Lite Neon Sign Co.
Sign Letters: Wagner Sign Service, Inc.
Sound: The Ballantyne Co.
Supply Dealer: Independent Theatre Supply Co.





READING •

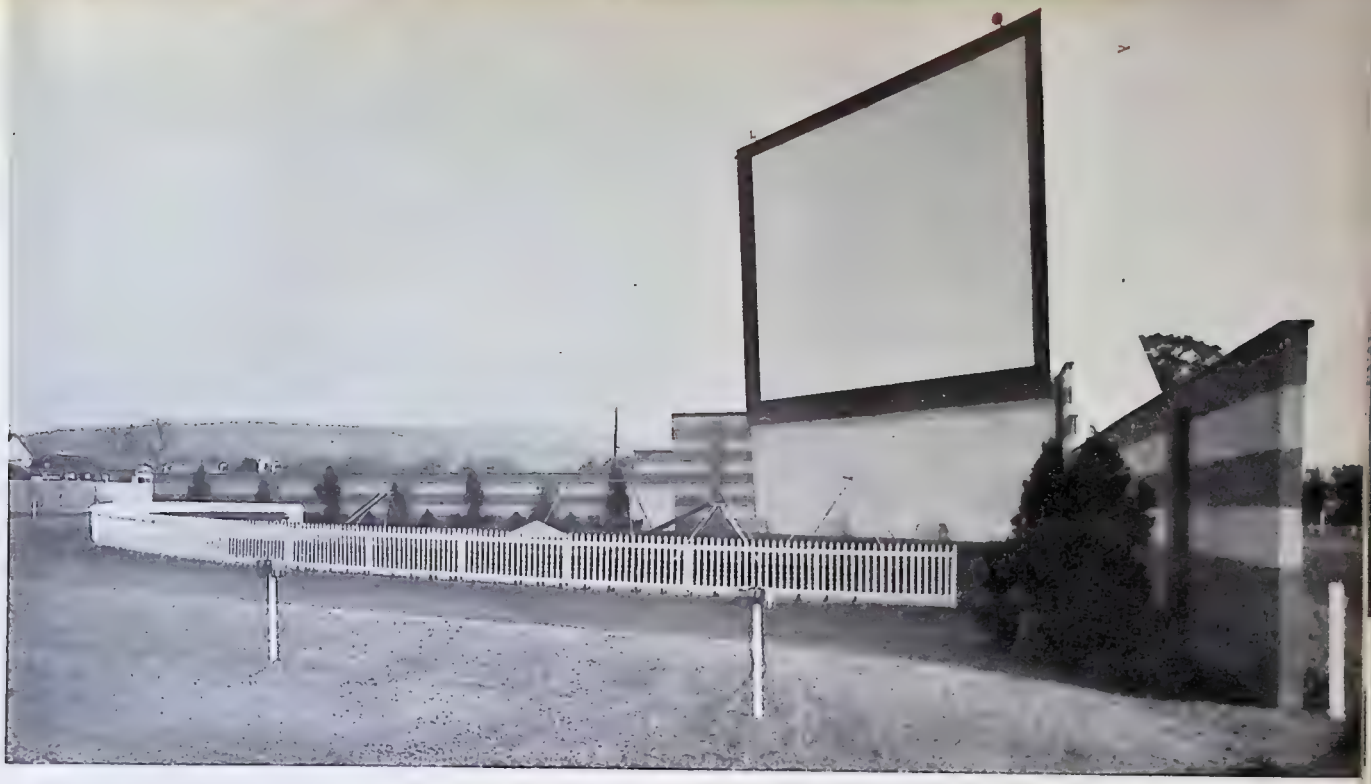
Temple, Pa.

Situated directly off busy Route 222, the Reading has served the entertainment needs of an industrial and rural population since its opening August 1, 1949.

The entrance approach, as well as all interior roadways, has been solidly blacktopped. A double-faced neon sign advertises current attractions and directs cars to the twin boxoffices. Patrons then proceed around the screen tower, with its 40' neon sign on the back and protruding walls done in grey and coral rose horizontal bands, into the ramp area.

Special features include a children's playground, and bottle warmers for babies in the refreshment building, which has a circular terrance for continued show viewing by the patrons.







A WHITE PICKET FENCE surrounds the playground in front of the screen lower, around which shrubs have been planted. A neon-striped canopy extends over the glass-block ticket booths on a well-lighted entrance approach. Low rail fence encloses the evergreen and shrubbery at the left.



REFERENCE DATA

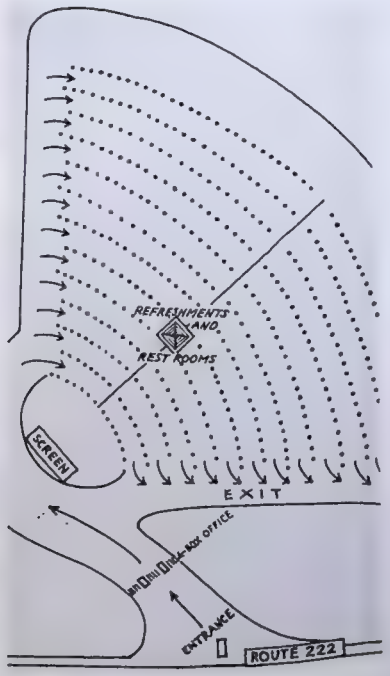
OWNER: Berkley 222 Corp.
OPERATOR: Reading Drive-In Theatre Co., Inc.
ARCHITECT: Leon M. Einhorn.
CAR CAPACITY: 744.
COST OF THEATRE: $140,000.
COST OF EQUIPMENT: $22,000.
SIZE OF LOT: 16 acres.

Generators: Hertner Electric Co.
Lenses: Kollmorgen Optical Corp.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Hy Candescent.
Projection Machines: International Projector Corp. Simplex E-7.
Sign: Whiteway Neon.
Sign Letters: Wagner Sign Service.
Sound: International Projector Corp.
Supply Dealer: National Theatre Supply.



THE RAMP AREA is enclosed by a rustic fence. The refreshment building houses rest rooms in peach and green as well as the confection stand.









GULF •

Corpus Christi, Tex.

The 725-car Gulf, situated on the outskirts of Corpus Christi, has catered primarily to the entertainment needs of a surrounding working class populace since its opening in January, 1949.

A large and graphic sea gull mural dominates the back face of the screen tower at the stone-surfaced entrance approach. Above the mural on the corrugated metal facade the name of the theatre is spelled out in neon lettering. A battery of spotlights below illuminates the mural at night.

Shrubbery has been profusely planted in the island containing the attraction board, as well as along the entrance drive itself. This landscaping makes a pleasing impression on entering patrons.

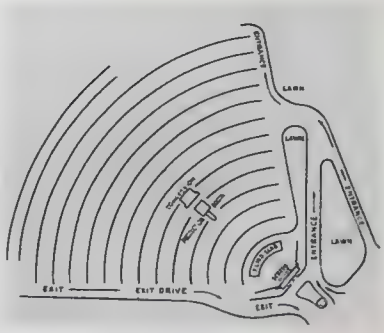
Inside, a complete array of recreational equipment has been provided in the playground at the base of the screen tower. The projection booth and concession building are located a short distance back in the blacktopped ramp area. The latter contains a de luxe confection stand with a tile front and awning overhead.



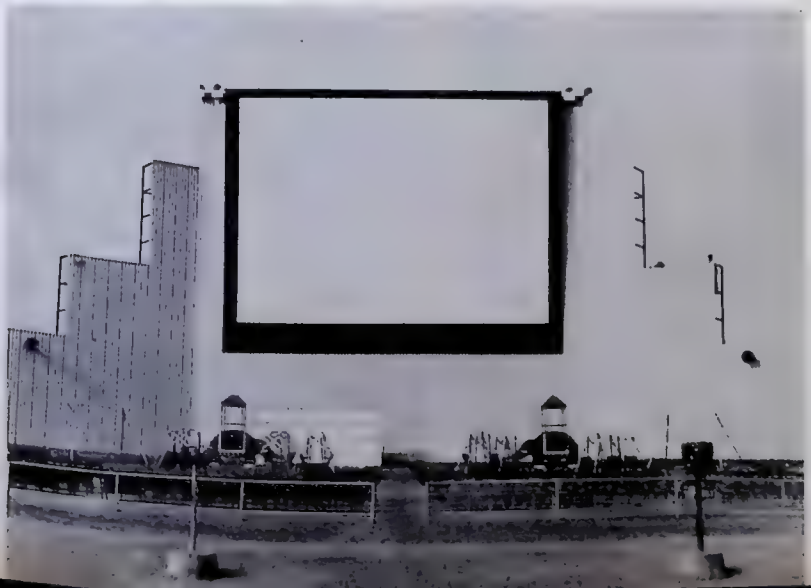
REFERENCE DATA

OWNER & OPERATOR: Ezell & Associates.
ARCHITECT: Jack Corgan.
CAR CAPACITY: 750.
COST OF THEATRE: $100,000.
COST OF EQUIPMENT: $28,000.
SIZE OF LOT: 13 acres.

Changeovers: Weaver Mfg. Co.
Coinchanger: Johnson Fare Box Co.
Generators: Hertner Electric Co.
In-Car Speakers: International Projector Corp. Simplex.



Lenses: Bausch & Lomb Optical Co. Super Cinephor.
Projector Lamps: J. E. McAuley Mfg. Co. Peerless Hy Candescent.
Projection Machines: International Projector Corp. Super Simplex.
Rewinders: GoldE Mfg. Co.
Sign: Theatre Specialties, Inc. Bevelite.
Sign Letters: Theatre Specialties, Inc. Bevelite 10", 17".
Sound: International Projector Corp. Simplex 4 Star.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp.







WHITTIER •

Pico, Calif.

Said to be one of the largest single drive-in theatres in the nation, the 1,225-car Whittier opened October 12, 1949, in a suburb of Los Angeles. Pictures 68′ wide are shown on the giant screen.

A blacktopped driveway approaches the beautifully landscaped entrance. The back face of the screen tower, which houses offices and maintenance rooms, is covered by an animated mural with a background that typifies the surrounding locale.

Across the face of the mural, which is brilliantly lighted at night, the name of the theatre is spelled out in script characters. Redwood walls flank the screen tower, and a two-faced reader board is at one side.

The area in front of the screen has been made into a fully equipped children's playground. A centrally located concession building, separate from the projection booth, is done in birch wallpaper.









REFERENCE DATA

OWNER & OPERATOR: Pacific Drive-In Theatres, Inc.
ARCHITECT: Arthur J. Drielsma.
CAR CAPACITY: 1,225.
COST OF EQUIPMENT: $28,000.
SIZE OF LOT: 900′ x 800′.

Changeovers: Essannay Electric Mfg. Co. Strong "Zipper".
Coinchanger: Coinometer.
Generators: Motiograph. Inc. Hi-Power.
In-Car Speakers: Motiograph, Inc.
Lenses: Kollmorgen Optical Corp. Super Snaplite.
Projection Lamps: Motiograph, Inc.
Projection Machines: Motiograph, Inc. AA.
Rewinders: Goldberg Bros.
Sign & Marquee: Wagner Sign Service, Inc.
Sign Letters: Wagner Sign Service, Inc. 10″ & 17″ Plastic.
Sound: Motiograph, Inc.
Supply Dealer: B. F. Shearer Co.
Ticket Issuing Machine: General Register Corp.
Vending Machines: C. Cretors & Co. Popcorn.







CEDAR VALLEY •

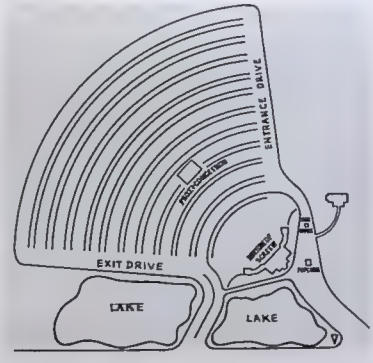
Rome, Ga.

The soft charm of southern plantation architecture, characteristic of the surrounding countryside, keynotes the design of this theatre, opened in August.

The screen tower building with its handsome colonial facade stretches out on either side in the form of curved loggias, pavilions, and perforated brick walls to shield the ramps from Highway 27. The color scheme of this frontal unit is carried out in white walls, yellow shutters, and green and yellow striped roofs.

A large recreation area has been set off at the rear of the screen for children, while grown-ups may relax in chairs or benches on the lawn amidst colorful lawn umbrellas.

Lighting arrangements have been carefully planned to show off the full architectual and landscaping beauty at night. The "night club" atmosphere after dark is dramatically reflected in the two lakes flanking the entrance-exit drives.



REFERENCE DATA

OWNER & OPERATOR: Lam Operating Co.
ARCHITECT: Tucker & Howell.
CAR CAPACITY: 700 (plus 200 seats).
COST OF THEATRE (including equipment): $175,000.
SIZE OF LOT: 35 acres.

Chairs: American Seating Co. Stadium Type.
Changeovers: RCA Brenkert.
Generators: Motiograph Hi-Power.
Lenses: Kollmorgen Optical Corp.
Projection Lamps: Motiograph, Inc.
Projection Machines: RCA Brenkert.
Rewinders: GoldE Mfg. Co.
Sign: Macon Neon Sign Co.
Sign Letters: Wagner Sign Service, Inc. 10", 24".
Sound: RCA.
Supply Dealer: Southeastern Theatre Equip. Co.
Ticket Issuing Machine: General Register Corp.









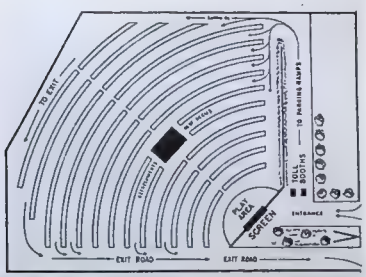
LAWRENCE •

Trenton, N. J.

Its location on U. S. Highway No. 1 is indeed a premium one, for the Lawrence is thereby afforded a drawing area of nearly one million persons. Second-run double features have formed the operating policy, since opening day, August 23.

A 40-foot tower with flasher neon lights rises from the two-sided attraction board at the entrance to the theatre. A rustic atmosphere has been kept through the retention of the original trees and shrubbery growing on the site and the erection of rustic-type fencing.





The hard-paved and well-lighted roadway leads through the dual boxoffices to serve as a holding area behind, as well as a means of entry into the theatre itself from the rear.

Concession stand, prjoection booth, and rest rooms are combined in a cinder block building conveniently located in the paved ramp area. Tables and chairs have been placed in front of the concession part.

A children's play area has been developed directly below the screen. Cars enter the theatre from behind the screen and are routed to the rear to enter ramps.

REFERENCE DATA

OWNER: S. & F. Improvement Corp.
OPERATOR: Walter Reade Theatres, Inc.
ARCHITECT: S. Herbert Taylor
CAR CAPACITY: 850.
SIZE OF LOT: 16½ acres.

Projection Lamps: J. E. McAuley Mfg. Co.
Projection Machines: International Projector Corp. Simplex.
Sign Letters: Manhattan Wood Letter Co.
Sound: International Projector Corp. Simplex.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Co.





BRANDYWINE •

Wilmington, Del.

Admirably situated on the heavily traveled DuPont Highway, the Brandywine has shown primarily double feature reissues to a regular industrial and "white collar" worker patronage since its opening July 15, 1949.

The neatly landscaped entrance is marked by the burgundy and white-striped back of the screen tower in neon. The word "Brandywine" is superimposed in magenta script, and the word "drive-in" is in white Egyptian block letters.

Beneath the screen tower inside is a fully equipped children's playground. Accommodations have been provided for about 250 walk-in patrons as well as 750 cars.

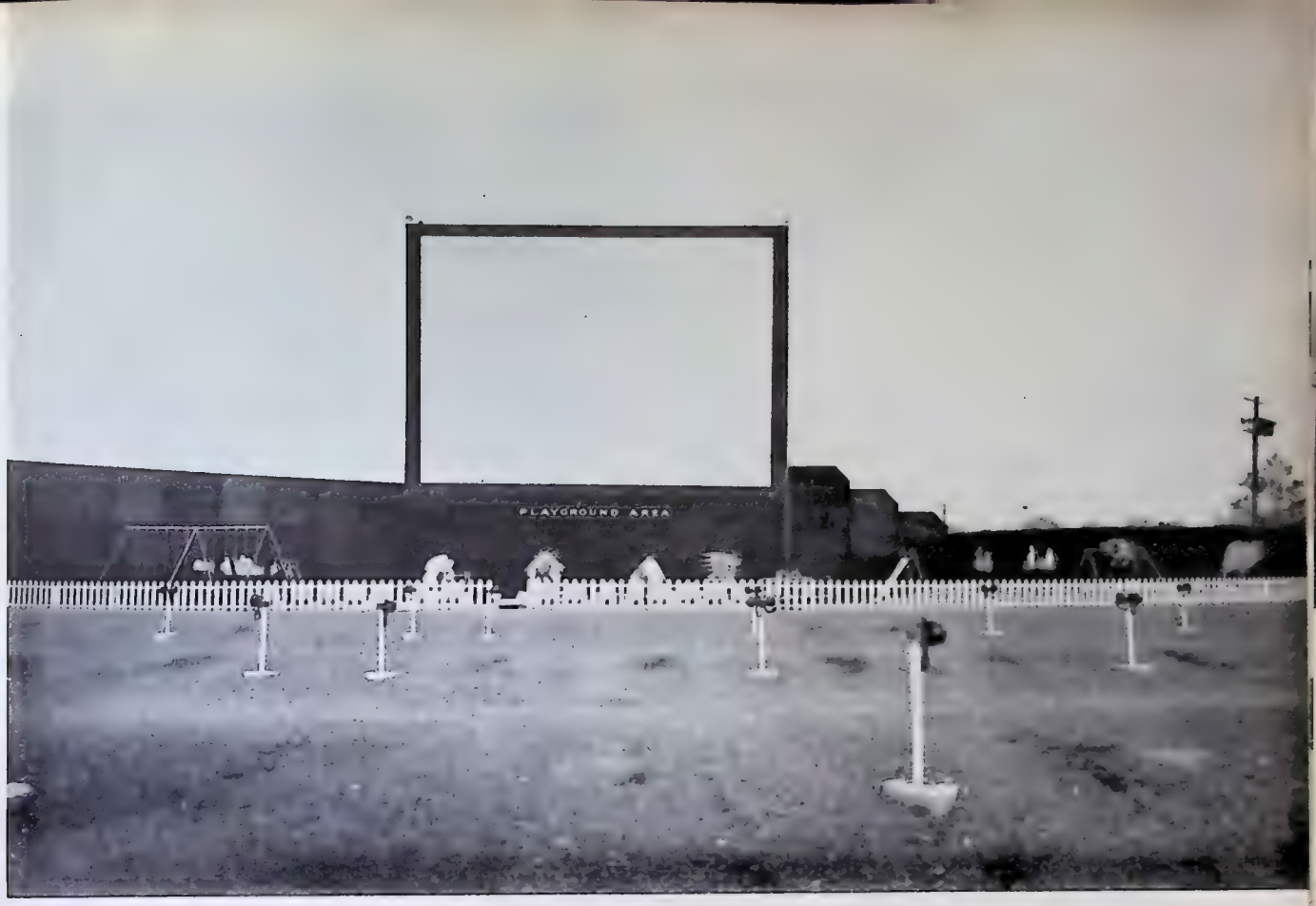
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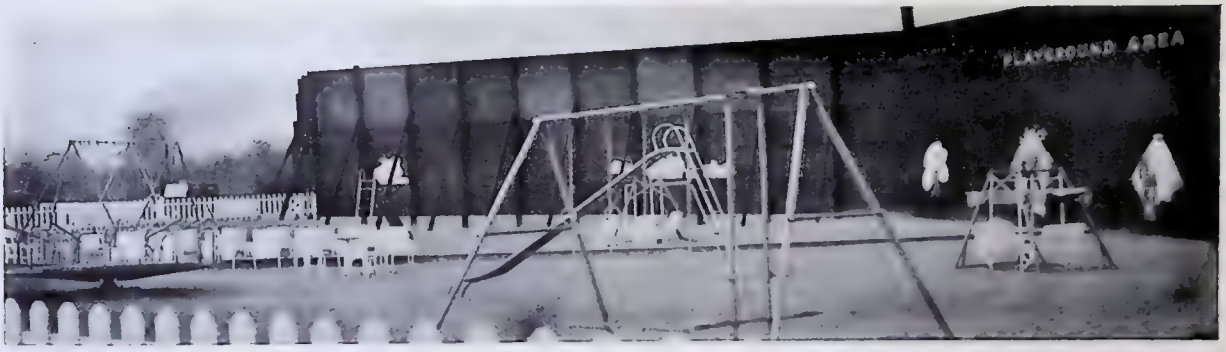
OWNER: M & S Amusement Enterprises, Inc.
OPERATOR: S. O. Taustin & M. C. Geller.
ARCHITECT: W. Ellis Preston.
CAR CAPACITY: 550.
COST OF THEATRE: $125,000.
COST OF EQUIPMENT: $50,000.
SIZE OF LOT: 22.8 acres.

Coinchanger: Coinometer Corp.
Generators: Motiograph, Inc. Hi-Power.
In-Car Speakers: Motiograph. Inc.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: Motiograph, Inc.
Projection Machines: Motiograph, Inc.
Sign: Claude Neon Co.
Sign Letters: Wagner Sign Service, Inc.
Sound: Motiograph, Inc.
Supply Dealer: J. F. Dusman Co.
Ticket Issuing Machine: General Register Corp.











ANIMATED figures enliven the wall of the playground. Baby bottles are warmed at the concession stand, combined with projection and rest rooms.





TROPICAIRE •

Miami, Fla.

Justly termed "the theatre in a garden," superb landscaping, in the form of exotic palm trees, flowering shrubs, and broad lawns, has given the Tropicaire the appearance of a tropical floral paradise since its opening February 15, 1949.

The screen tower at the main entrance houses offices, a storeroom, and an apartment for the manager. A unique "hanging" garden on the back contains a variety of tropical flora and rare palms. At night, multi-colored floodlights play on the garden and the neon name letters.

Driveways, which run back from the screen to the ninth ramp at 40-degree angles and thence parallel to the center line of the site to the rear, bound the parking area to improve vision and traffic flow.

Projection, rest room, and refreshment facilities are housed in one central building. A playground is on the west lawn.





REFERENCE DATA

OWNER AND OPERATOR: Tropicaire Drive-In Theatre, Inc.
CAR CAPACITY: 700.
COST OF THEATRE: $160,000.
SIZE OF LOT: 12 acres.

Coinchanger: Coinometer.
Generators: RCA Century.
In-Car Speakers: RCA.
Lenses: Kollmorgen Optical Corp. Snaplite F 1.9.
Projection Lamps: RCA Brenkert.
Projection Machines: RCA Brenkert BX-80.
Rewinders: GoldE Mfg. Co.
Sign: Dade Neon Co.
Sign Letters: Wagner Sign Service, Inc. 6", 10" Plastic.
Sound: RCA.
Supply Dealer: Southeastern Theatre Equip. Co.
Ticket Issuing Machine: General Register Corp.



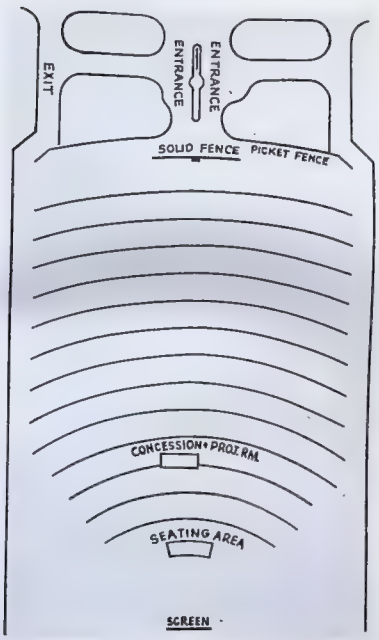
SKYLARK •

Pocahontas, Ark.

Built at nominal cost on a 10-acre lot near the outskirts of town, the 500-car Skylark, opened in October, 1949, is owned and operated by the same management which runs two downtown indoor theatres.

A large, double-faced attraction board at the entrance is brilliantly illuminated at night. As cars pass by the glassblock and wood boxoffice, warning signs on a fence behind caution drivers to turn off their lights and drive slowly.

Inside, seating provisions for walk-in patrons and a children's playground have been provided. The projection booth and concession stand have been incorporated into a single structure.









REFERENCE DATA

OWNER & OPERATOR: Henley & Burris Smith.
CAR CAPACITY: 500.
COST OF THEATRE: $45,000.
COST OF EQUIPMENT: $25,000.
SIZE OF LOT: 10 acres.

Changeovers: Weaver Mfg. Co.
Generators: Hertner Electric Co.
In-Car Speakers: International Projector Corp. Simplex.
Lenses: Bausch & Lomb Optical Co. Super Cinephor.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex E-7.
Sign Letters: Theatre Specialties, Inc. Bevelite.
Sound: International Projector Corp. Simplex 4 Star.
Supply Dealer: National Theatre Supply.



VARSITY •

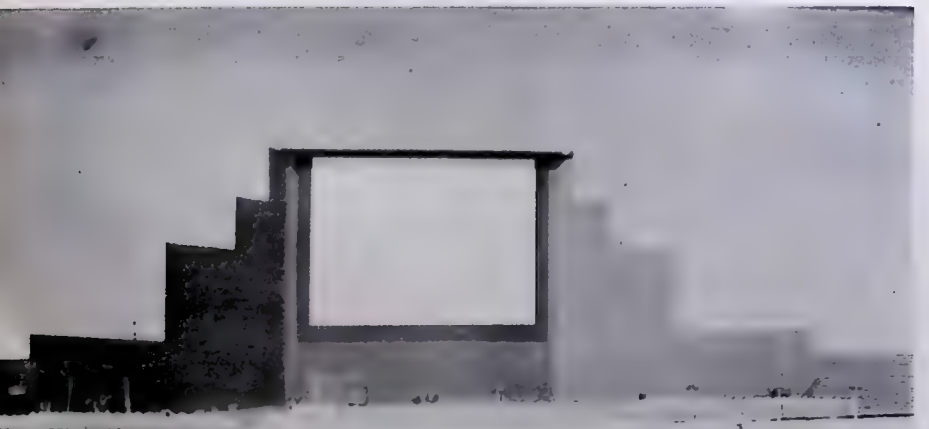
San Antonio, Tex.

Four show changes weekly are offered at the Varsity, opened July 14, 1949, on a roadway connecting with a new inter-regional highway.

A 30' x 40' mural on the back of the steel screen tower at the entrance depicts a football game in progress. This graphic display is effectively lighted at night in neon. Between the entrance and exit driveways is a "V-shaped" island on which stands a two-sided attraction board.

The popularity of accommodations for walk-in patrons is exemplified by the fact that a separate boxoffice has been provided for them. A children's playground and an air-conditioned snack bar round out the theatre's special facilities.





REFERENCE DATA

OWNER & OPERATOR: Mul-Den Enterprises.
ARCHITECT: Henrrick and Adams.
CAR CAPACITY: 638.
COST OF THEATRE: $100,000.
COST OF EQUIPMENT: $25,000.
SIZE OF LOT: 600' x 700', plus 100' x 150' entrance.

Generators: Motiograph, Inc.
In-Car Speakers: Motiograph, Inc.
Lenses: Kollmorgen Optical Corp. F 1.9.
Projection Lamps: Motiograph, Inc.
Projection Machines: Motiograph, Inc.
Rewinders: GoldE Mfg. Co.
Sign & Marquee: Wagner Sign Service.
Sign Letters: Wagner Sign Service, Inc.
Sound: Motiograph, Inc.
Supply Dealer: Modern Theatre Equip.
Ticket Issuing Machine: General Register Corp.
Vending Machines: Manley, Inc.

REFERENCE DATA

OWNER: Tidewater Theatres, Inc.
OPERATOR: Sidney Lust Theatres.
ARCHITECT: George M. Petersen.
CAR CAPACITY: 716.
COST OF THEATRE: $175,000.
COST OF EQUIPMENT: $35,000.
SIZE OF LOT: 11 acres.

Changeovers: Weaver Mfg. Co.
Generators: Hertner Electric Co.
In-Car Speakers: RCA.
Lenses: Bausch & Lomb Optical Co., Super Cinephor Coated.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Hy Candescent.
Projection Machines: International Projector Corp. Simplex E-7.
Sign: Continental Sign Co.
Sign Letters: Wagner Sign Service, Inc. 10", 17" Plastic.
Sound: RCA.
Supply Dealer: Elmer H. Brient & Sons, National Theatre Supply, Ben Lust Theatre Supply Co.
Ticket Issuing Machine: General Register Corp.





SIDNEY LUST'S •

Hampton, Va.

Farmers and shipbuilders, who pay $1.20 per car to see neighborhood first-runs primarily, form the regular patronage of this theatre, opened April 19, 1949.

Features of the eye-catching front are the attraction signs bordering on the highway and the large name sign on the facade of the screen tower, in which offices are housed. Two masks in neon lighting lend decorative effect to the face.

The theatre's elaborate landscaping may be noted in the flowers and shrubs in front. White lawn furniture and gaudy beach umbrellas add color to the scene.

A centrally located building in the 14-ramp parking area contains the projection room, snack bar, and rest rooms.





STARLITE •

Medford, Ore.

Located two and a half miles south of Medford on Highway 99, the Starlite was opened June 8, 1949. Pictures are shown 42 days after their downtown runs and command an admission scale of 50 cents for adults. Top action features have proven to be the most popular.

A shimmering white screen tower is of reinforced concrete with the name of the theatre in block letters on the side facing the highway. An impressive landmark, it is visible for miles around when lighted at night. Near the entrance driveway stands a large attraction board.

Stone-surfaced roadways lead in and out of the parking area, where carefully graded ramps afford perfect sight lines from any spot. A children's playground is situated beneath the screen.

REFERENCE DATA

OWNER: Oregon-California Theatres, Inc.
OPERATOR: Robert L. Lippert Theatres.
ARCHITECT: Bernard G. Nobler.
CAR CAPACITY: 643.
COST OF THEATRE: $100,000.
COST OF EQUIPMENT: $22,500.
SIZE OF LOT: 10 acres.

Changeovers: Essannay Electric Mfg. Co. Strong "Zipper".
Generators: RCA Century.
In-Car Speakers: RCA.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: RCA Brenkert.
Projection Machines: RCA Brenkert.
Rewinders: Goldberg Bros.
Sign & Marquee: Wagner Sign Service, Inc.
Sign Letters: Wagner Sign Service, Inc. 7" Red Plastic.
Sound: RCA.
Supply Dealer: Western Theatrical Equip. Co.

LOW GUARD FENCES run along driveways, while lights on poles brighten the way. Walls shield the ramp area from car headlights.

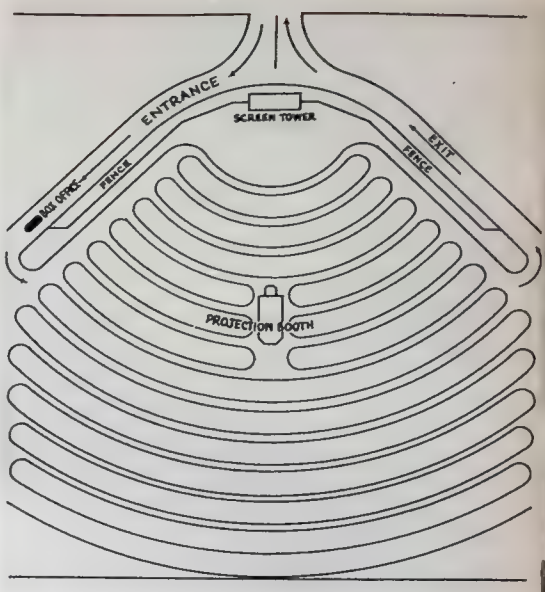


THE NEAT APPEARANCE of the Starlite exerts a powerful lure on passing motorists. Two pennants add a note of color to the brick, wood and glass-enclosed boxoffice.



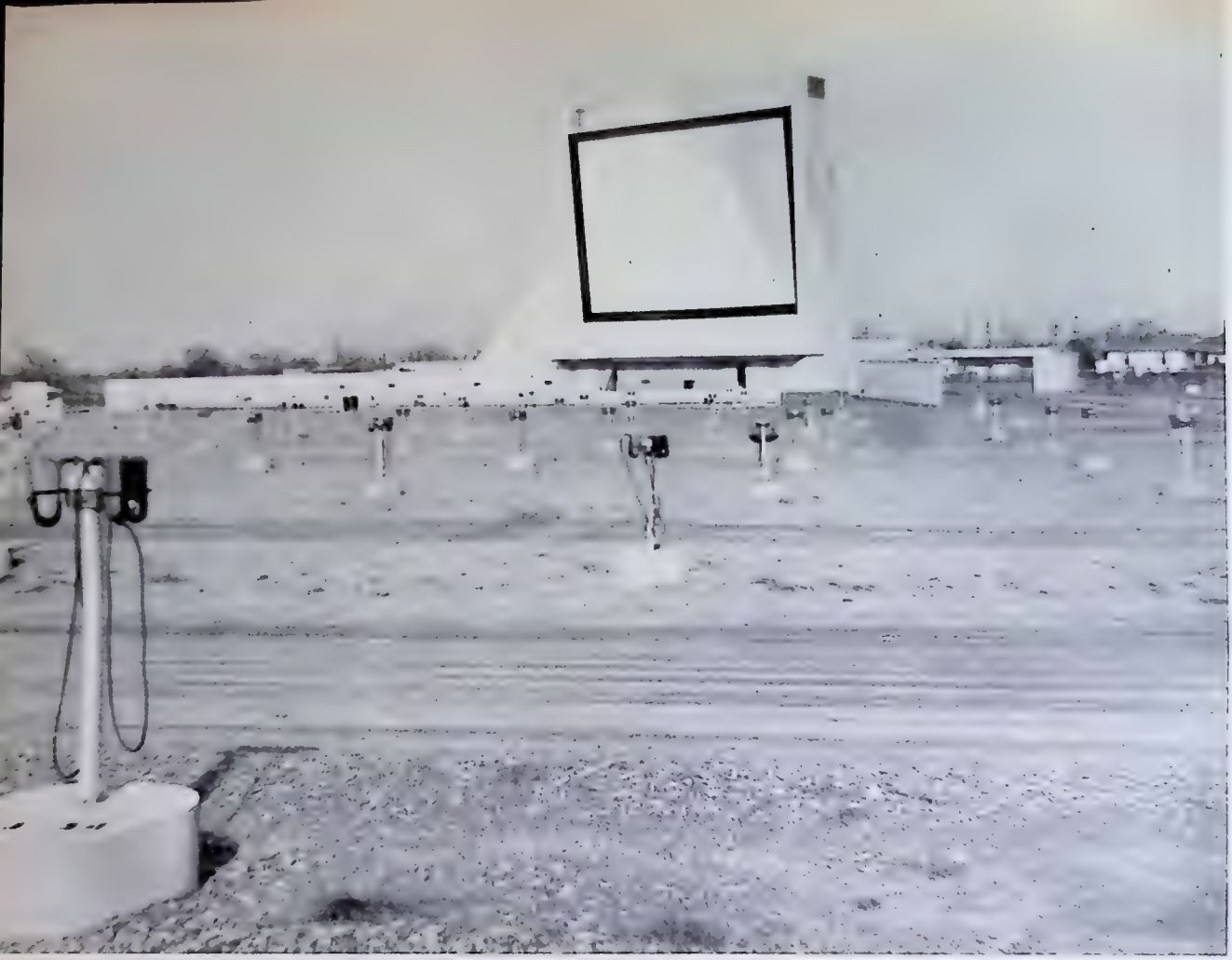


THE CHILDREN'S PLAYGROUND is outfitted with all types of recreational equipment. Benches in foreground may be used by walk-in patrons or parents watching their children at play. A view looking toward the screen shows the expert grading of the ramps for flawless perception.



PLOT PLAN shows how cars enter the theatre at left of screen tower and exit to the right. Driveway for entrance and exit is near back of projection booth.





SKY-VUE •

Memphis, Tenn.

The Sky-Vue, built on a 20-acre lot in a suburban district of Memphis, was opened in June, 1949. The entrance, situated on a main boulevard, is marked by a large two-sided attraction board from which a sign tower bearing the theatre name rises.

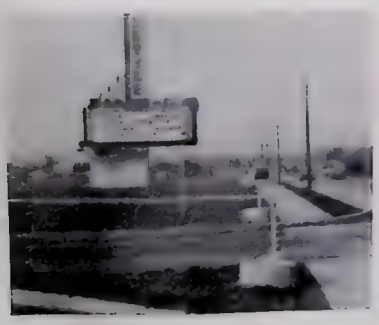
Since walk-in patronage is heavy, 700 seats and a separate boxoffice have been provided for pedestrians. Other notable features include a playground and two concession stands—one at the base of the screen and one in the center of the lot.

REFERENCE DATA

OWNER: Sky-Vue Theatre Corp.
OPERATOR: H. H. Roth.
ARCHITECT: Northern, Perrell & Windrom.
CAR CAPACITY: 750.
COST OF THEATRE: $250,000.
COST OF EQUIPMENT: $50,000.
SIZE OF LOT: 20 acres.

Coinchanger: Johnson Fare Box Co.
Generators: Hertner Electric Co.
Lenses: Bausch & Lomb Optical Co. Super Cinephor.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Hy Candescent.
Projection Machines: International Projector Corp. Simplex E-7.
Rewinders: GoldE Mfg. Co.
Sign Letters: Theatre Specialties, Inc. Bevelite 10", 17".
Sound: International Projector Corp. Simplex 4 Star.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp.

GRASSY lawns encompass driveways and sign.



REST ROOMS are situated in this low structure.



CONCESSION stand below screen faces walk-ins.



9W •

Kingston, N. Y.

Named after the route on which it borders, the 9W has had a sizeable drawing populace since its opening May 30, 1949. The large rustic setting includes a picnic ground, numerous facilities for adult and children's play, and a dance floor adjoining the concession stand.

The entrance lane leads to two ticket booths with a neon-lighted canopy overhead. The theatre name on the face of the screen tower is lighted by "gooseneck" lamps at night. An attraction board stands nearby.

A pink cinder-block building in the floodlighted ramp area houses projection, refreshment, and toilet facilities. Television is shown in a special location.







REFERENCE DATA

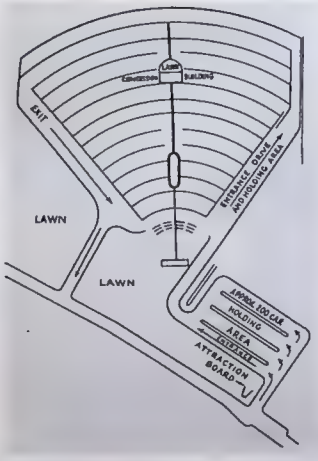
OWNER & OPERATOR: Walter Reade Theatres, Inc.
ARCHITECT: Leon M. Einhorn.
CAR CAPACITY: 700.
SIZE OF LOT: 18 acres.

In-Car Speakers: Motiograph, Inc.
Projection Lamps: Motiograph, Inc.
Projection Machines: Motiograph, Inc.
Sign Letters: Manhattan Woodletter Co.
Sound: Motiograph, Inc.
Supply Dealer: Joe Hornstein, Inc.
Ticket Issuing Machine: General Register Corp.









PADUCAH •

Paducah, Ky.

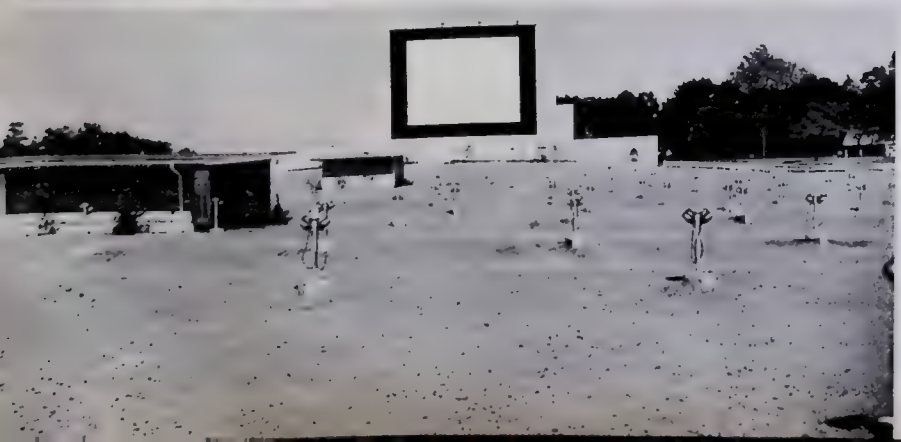
Lush "blue grass of Kentucky" lawns surround the beautiful Paducah, opened in June, 1949. An Indian head, above which the theatre name is set in neon block letters, dominates the back face of the screen tower. A lighted canopy extends over offices and the ticket booth.

Cartoon characters, lighted at night, enliven the walls of the playground. Projection and concession facilities are housed in separate ramp area buildings.

REFERENCE DATA

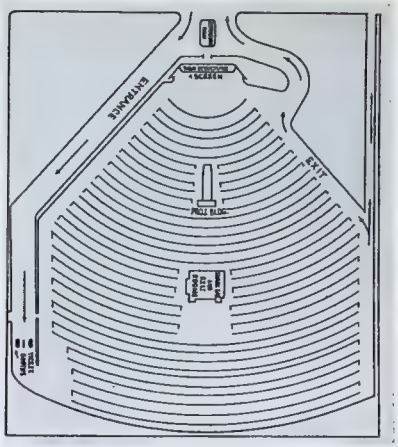
OWNER & OPERATOR: Columbia Amusement Co.
CAR CAPACITY: 600.

Changeovers: Motiograph, Inc.
Generators: Motiograph, Inc. Hi-Power.
In-Car Speakers: Motiograph, Inc.
Projection Lamps: Motiograph, Inc.
Projection Machines: Motiograph, Inc. AA.
Sign Letters: Adler Silhouette Letter Co.
Sound: Motiograph, Inc.











CENTURY •

Inglewood, Calif.

Located on the outskirts of Inglewood, the 900-car Century was opened July 5, 1949. The nautical mural on the highway side of the screen tower is brilliantly illuminated at night, as are the theatre name at the top and the attraction board below between the entrance and exit drives.

Traffic proceeds past two boxoffices on a hard-surfaced and clearly lined roadway into the ramp area. Here, a deluxe snack bar and rest rooms are housed in a low structure separate from the projection building. A children's playground, outfitted with all types of gymnastic equipment, is directly under the screen.



PRAIRIE MURALS, shiny railings, and a gaily striped ceiling brighten up the snack bar. Small shrubs are planted in front of ticket booths.

REFERENCE DATA

OWNER & OPERATOR: Pacific Drive-In Theatres, Inc.
ARCHITECT: Wm. Glenn Balch, and Louis L. Bryan.
CAR CAPACITY: 918.
COST OF THEATRE: $204,833.

Generators: Motiograph, Inc., Hi-Power.
In-Car Speakers: RCA.
Lenses: Kollmorgen Optical Corp. F 1.9.
Projection Lamps: Motiograph, Inc.
Projection Machines: Motiograph, Inc., AA.
Rewinders: Goldberg Bros.
Sign & Marquee: Wagner Sign Service, Inc.
Sign Letters: Wagner Sign Service, Inc.
Sound: RCA.
Supply Dealer: B. F. Shearer Co.





RODEO •

Tucson, Ariz.

Opened November 3, 1949, the Rodeo borders on the Nogales highway in southern Tucson. Passing motorists cannot help but note a lasso-twirling cowgirl 44' high painted on back of the screen tower, which houses dressing rooms for personnel and administrative offices. The "rodeo girl" also appears beside the attraction board.

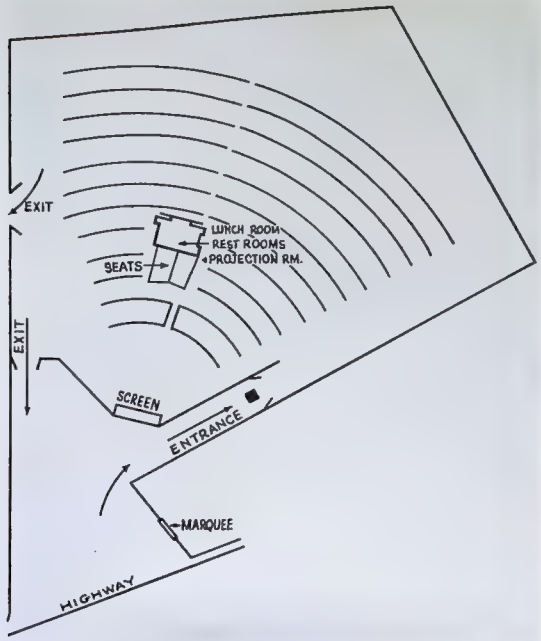
Projection, concession, and rest rooms are housed in a single building, in front of which are walk-in seats.

REFERENCE DATA

OWNER: Rodeo Drive-In Theatre, Inc.
GENERAL MGR.: Roy E. Hanson.
ARCHITECT: Bernard Friedman.
CAR CAPACITY: 600.
COST OF THEATRE: $170,000.
COST OF EQUIPMENT: $30,000.
SIZE OF LOT: 12 acres.

Changeovers: Weaver Mfg Co.
Coinchanger: Johnson Fare Box Co.
Generators: Hertner Electric Co.
In-Car Speakers: International Projector Corp. Simplex.
Lenses: Kollmorgen Optical Corp. F 1.9.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Hy Candescent.
Projection Machines: International Projector Corp. Simplex E-7.
Rewinders: GoldE Mfg. Co.
Sign Letters: Wagner Sign Service, Inc.
Sound: International Projector Corp. Simplex 4 Star.
Supply Dealer: National Theatre Supply.
Ticket Issuing Machine: General Register Corp.

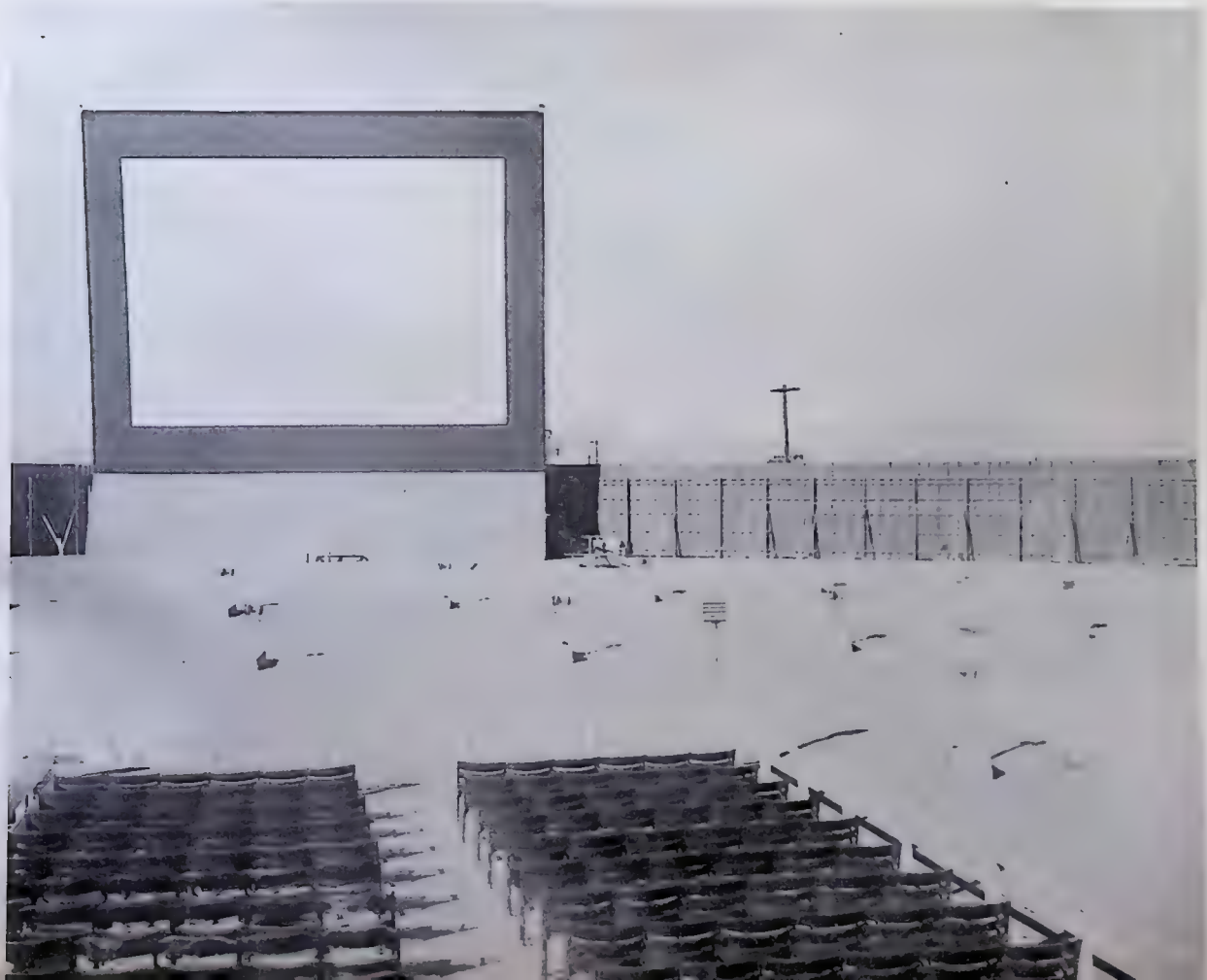


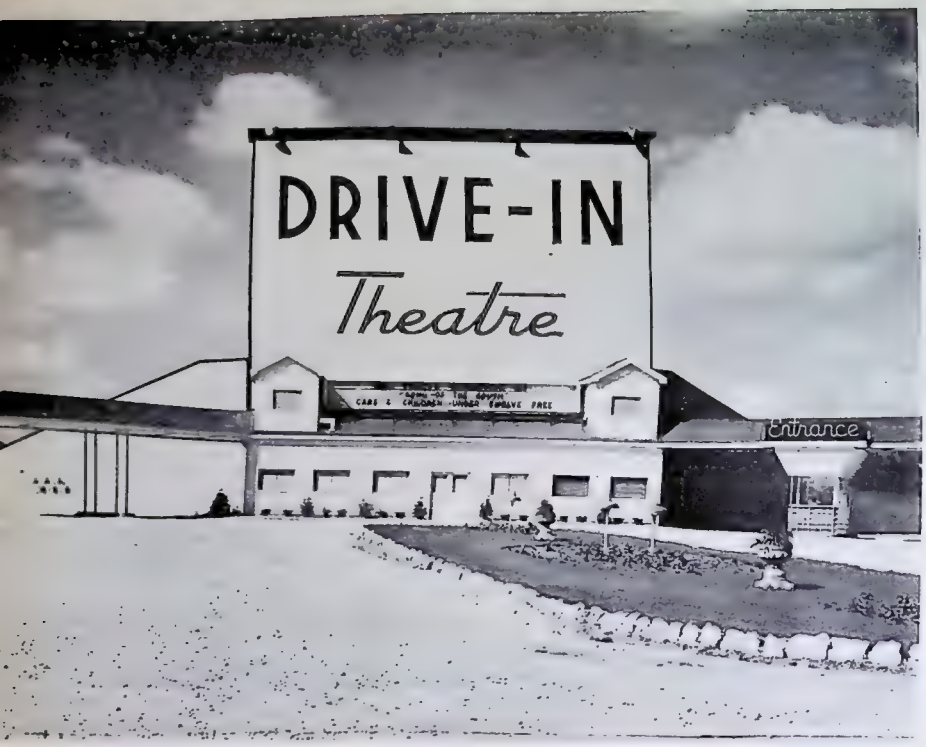


THE COMPACT LAYOUT of the Rodeo is shown in the above plot plan. A separate fenced-off section contains 200 seats for patrons who come on foot. The children's playground may be seen at the right.



THE SNACK BAR, nicknamed "the chuck wagon," has a horseshoe counter with a yellow plastic top. Walls are light green, ceiling ivory, and asphalt tile floor cinnamon color. Snack bar and adjoining rest rooms are air-conditioned.





DUBUQUE •

Dubuque, Iowa

Contrary to orthodox practice, the Dubuque, opened in July, 1949, was built on a sharply sloping plot of ground. The unique "balcony" thereby formed has several levels, the first of which above the 500-car main field parks 50 cars. The second "terrace" and holding area account for 200 more. Colored lights run along each "balcony" ramp, and a picnic area and playground are provided.

A neatly landscaped entrance drive bends around the wood and asbestos board screen tower. Projection, concession, and rest rooms are under one roof 225 feet from screen.

REFERENCE DATA

OWNER & OPERATOR: Tri-States Theatre Corp.
DESIGNER: Roy Runyeon.
CAR CAPACITY: 750.

Generators: Hertner Electric Co.
In-Car Speakers: International Projector Corp. Simplex.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless Magnarc.
Projection Machines: International Projector Corp. Simplex.
Sound: International Projector Corp.
Supply Dealer: National Theatre Supply.





SAN PEDRO •

San Pedro, Calif.

Opened June 6, 1949, the San Pedro has a distinctive trademark in a colorful mural emblazoned on the highway side of the steel and plaster screen tower building. At the top of the graphic illustration of a caballero on horseback waving to approaching ships, the theatre name is blocked out in neon-lighted letters.

The paved entrance drive winds its way past a mammoth attraction board through the twin boxoffices into the solidly surfaced ramp area. Included in the projection building is a brightly lighted snack bar with a circus theme on one wall.



REFERENCE DATA

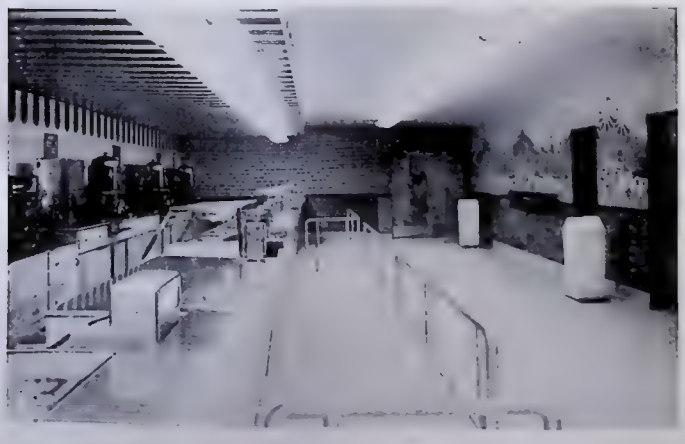
OWNER & OPERATOR: San Pedro Drive-In Theatre Corp.
ARCHITECT: Wm. Glenn Balch, and Louis L. Bryan.
CAR CAPACITY: 831.
COST OF THEATRE: $300,000.

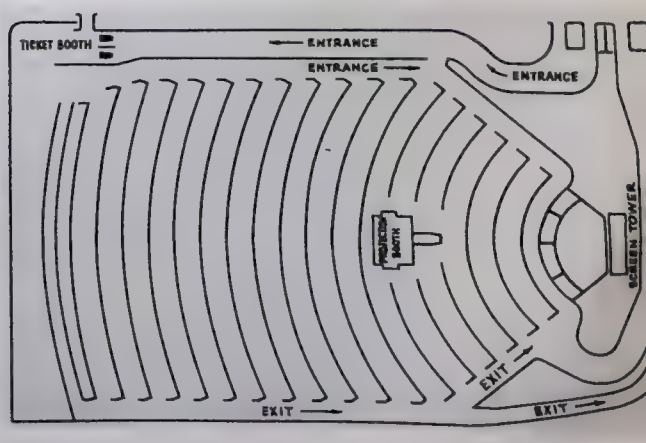
Generators: RCA Century.
In-Car Speaker: RCA.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: RCA Brenkert.
Projection Machines: RCA Brenkert.
Sign Letters: Wagner Sign Service, Inc.
Sound: RCA.
Supply Dealer: John P. Filbert Co., Inc.











MID-CITY •

Kenosha County, Wisc.

The maroon and green transite rear of the Mid-City's screen tower with giant neon lighting faces Route 42. Opened April 16, 1949 between Racine and Kenosha, pictures are shown 45 days after runs in the latter. An attraction board is set in front of the screen building, which houses the manager's office and personnel dressing rooms.

Special features inside include seats for 500 walk-in patrons, children's playground, a deluxe refreshment stand, and an elaborate underground drainage system to keep ramp area completely dry. Circus acts are also presented.

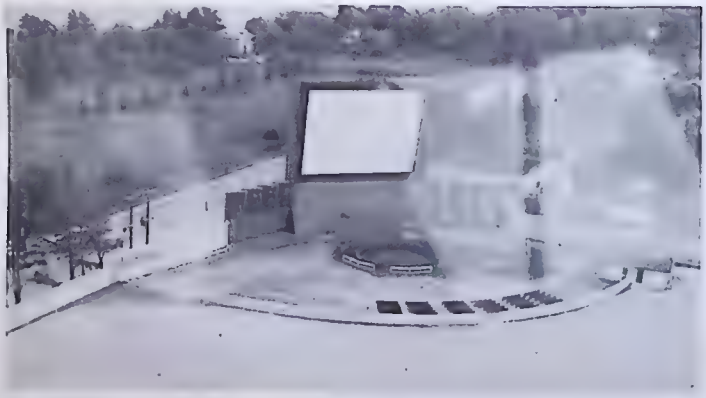
REFERENCE DATA

OWNER & OPERATOR: Standard Outdoor Theatres, Inc.
ARCHITECT: Brimeyer, Grellinger & Rose.
CAR CAPACITY: 765 (plus 500 seats).
COST OF THEATRE (including air conditioning): $225,000.
COST OF EQUIPMENT: $35,000.
SIZE OF LOT: 16 acres.

Generators: Motiograph, Inc.
In-Car Speakers: RCA.
Projection Lamps: Motiograph, Inc.
Projection Machines: Motiograph, Inc. AA.
Sign: White Way.
Sound: RCA.



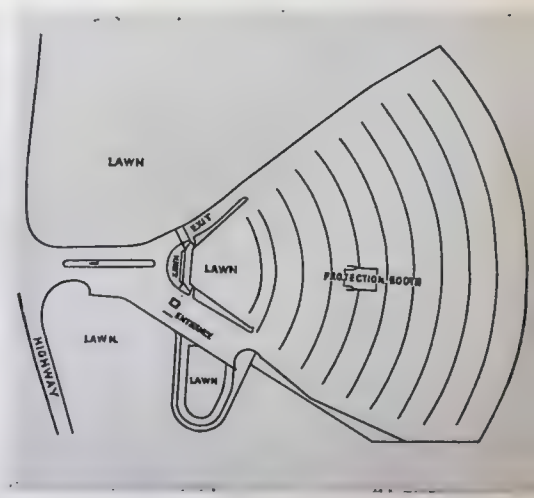














REFERENCE DATA

OWNER: Tallahassee Enterprises, Inc.
OPERATOR: Talgar Theatres.
ARCHITECT: Prentiss Huddleston & Associates.
CAR CAPACITY: 400.
COST OF THEATRE: $70,000.
COST OF EQUIPMENT: $30,000.
SIZE OF LOT: 500' x 800'.

Changeovers: Essannay Electric Mfg. Co. Strong "Zipper".
Generators: Hertner Electric Co.
In-Car Speakers: RCA.
Lenses: Bausch & Lomb Optical Co.
Projection Lamps: J. E. McAuley Mfg. Co. Peerless.
Projection Machines: International Projector Corp. Simplex.
Sign: Patrick-Neon, Inc.
Sound: RCA.
Supply Dealer: National Theatre Supply, Southeastern Theatre Equip. Co. of Fla.

DRIVE-IN •

Tallahassee, Fla.

Situated two miles south of the city limits on a coast highway, this theatre was opened July 15, 1949. Two shows nightly, family attractions primarily, are presented to a patronage drawn from the capital city and Florida State University.

Arriving patrons proceed up an asphalt entrance drive, which is lined with native palm trees, toward a lofty screen tower constructed of sheet metal, wood, and cemesto. On the highway side, the name "Drive-In Theatre" is blocked out in large neon letters. Two attractions boards along the entrance roadway are similarly lighted to draw passersby. Both entrances and exits have protective canopies overhead.

The white concrete block building in a strategic ramp-area location houses a refreshment stand and rest rooms in addition to the projection booth.

CHESTER PIKE •

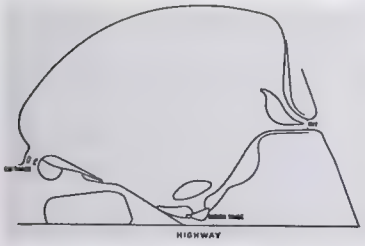
Eddystone, Pa.

The 930-car Chester Pike was opened in June, 1949, on a busy highway outside of the heavily industrialized city of Chester. Last-run pictures command with an adult admission of 50 cents (plus tax).

On the highway side of the lofty screen tower, the name of the theatre is spelled out in mammouth lighted block letters. Beneath the sizeable attraction board is a series of illuminated directional arrows pointing toward the entrance. A feature time board borders on the road itself.

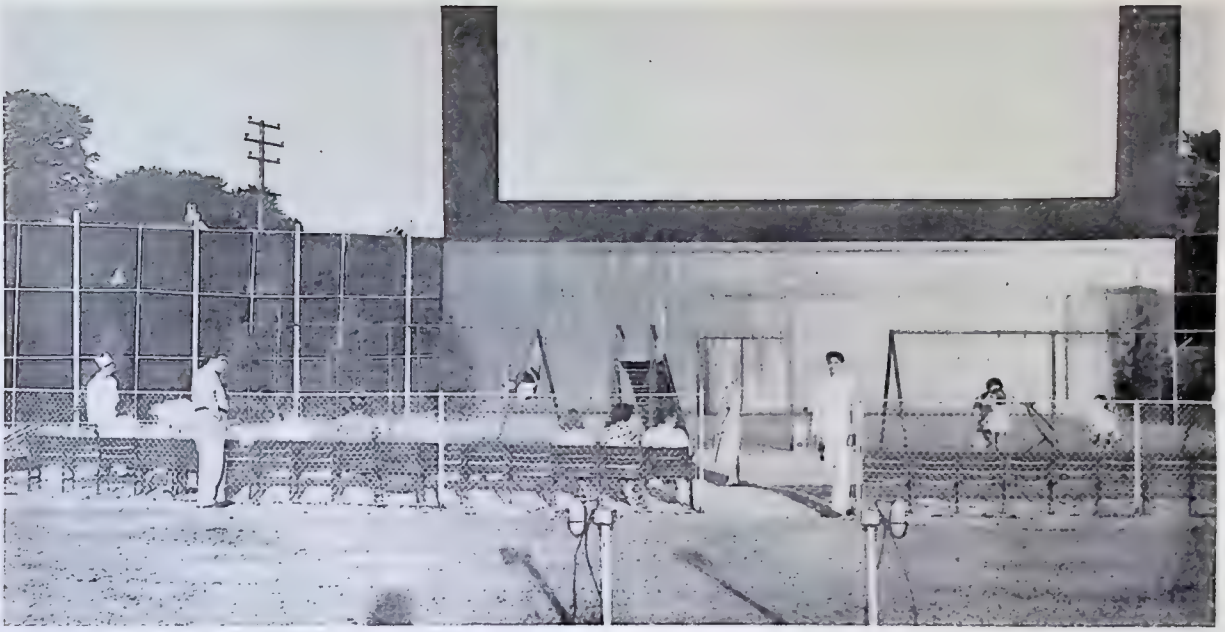
Flashing "lights out" signs admonish motorists to douse their headlights as they approach the twin boxoffices. Nearby shrubbery adds landscaping effect.

In addition to speakers, the surfaced ramp area contains a fully equipped children's playground at the foot of the screen and a combined projection-concession building with a dance floor.













SEATS IN PLAYGROUND REAR have sound so that parents may hear the show while watching children at play. A view of the exit area shows landscaping effects at left. Chairs on terrace in front of restaurant offer relaxation, while a dance floor in the rear provides intermission recreation.



REFERENCE DATA

OWNER & OPERATOR: A. M. Ellis Theatres Co.
ARCHITECT: David Supowitz.
CAR CAPACITY: 915.
SIZE OF LOT: 14 acres.

Changeovers: RCA Brenkert.
Coinchanger: Coinometer Corp.
Generators: RCA Century.
Lenses: Kollmorgen Optical Corp. Super Snaplite F 1.9.
Projection Lamps: RCA Brenkert.
Projection Machines: RCA Brenkert BX-80.
Rewinders: Goldberg Bros.
Sign: Phila. Sign Co.
Sign Letters: Adler Silhouette Letter Co.
Sound: RCA.
Supply Dealer: Blumberg Bros., Inc.
Ticket Issuing Machine: General Register Corp.
Ticket Chopper: General Register Corp.



TWIN •

Cincinnati, Ohio

Literally "two theatres in one," the Twin attains a formidable capacity of 1,800 cars in its two separate lots which face a single, two-faced screen tower. Each theatre, designated as the Norwood and the Reading Road respectively, has its own entrance and exit, boxoffices, and concession and projection booth.

Although it is a 15-minute drive from the main business district, the Twin lies close to the center of metropolitan Cincinnati in a drawing area of 500,000. Opened in May, 1949, first-suburban pictures are shown.

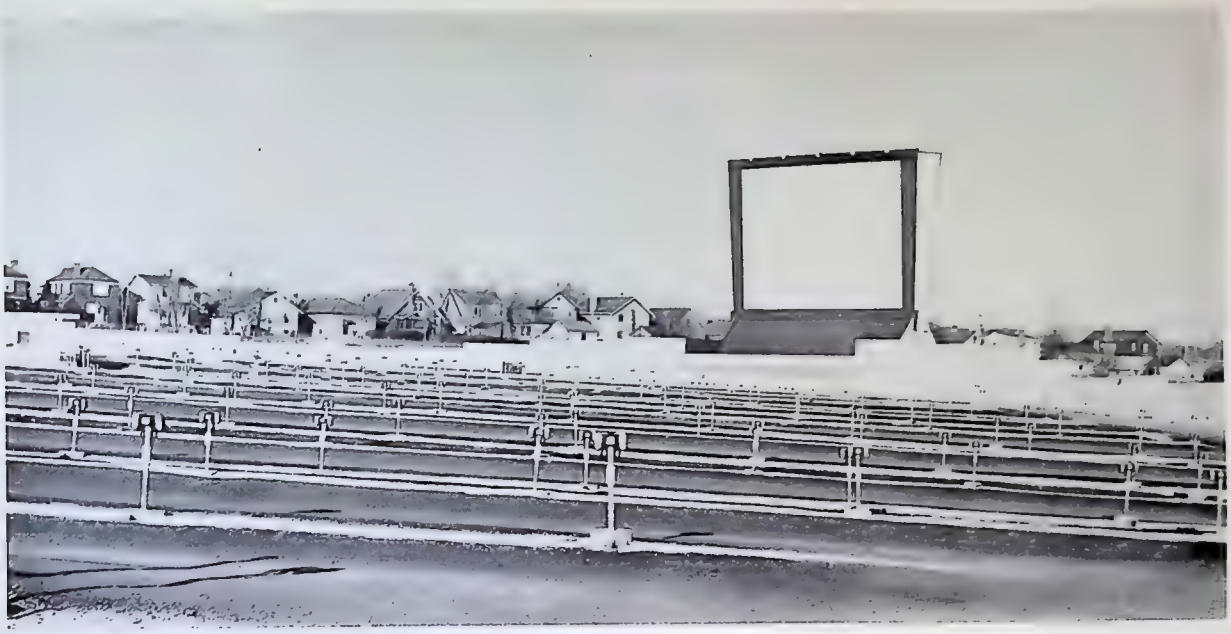
A drive-in shopping center adjoining the theatre is now being constructed.

REFERENCE DATA

OWNER: Shor, Inc.
OPERATOR: S. & S. Amusement Corp.
ENGINEER & ARCHITECT: Wm. W. Carlton & Associates.
CAR CAPACITY: 1,800 (plus 800 walk-in seats).
COST OF THEATRE: $500,000.
COST OF EQUIPMENT. $100,000.

Generators: RCA Century.
In-Car Speakers: RCA.
In-Car Heaters: Arvin.
Lenses: Bausch & Lomb Optical Co. F 2.
Projection Lamps: RCA Brenkert.
Projection Machines: RCA Brenkert.
Rewinders: Goldberg Bros.
Sign: The Lackner Co.
Sign Letters: Wagner Sign Service, Inc. 10" to 30".
Sound: RCA.
Supply Dealer: Midwest Theatre Supply Co.
Ticket Issuing Machine: General Register Corp.





STEPPED FENCES of wood and steel divide the two sections of the site.

THE ALL-STEEL FRAME holds steel deck screens on either side of tower.

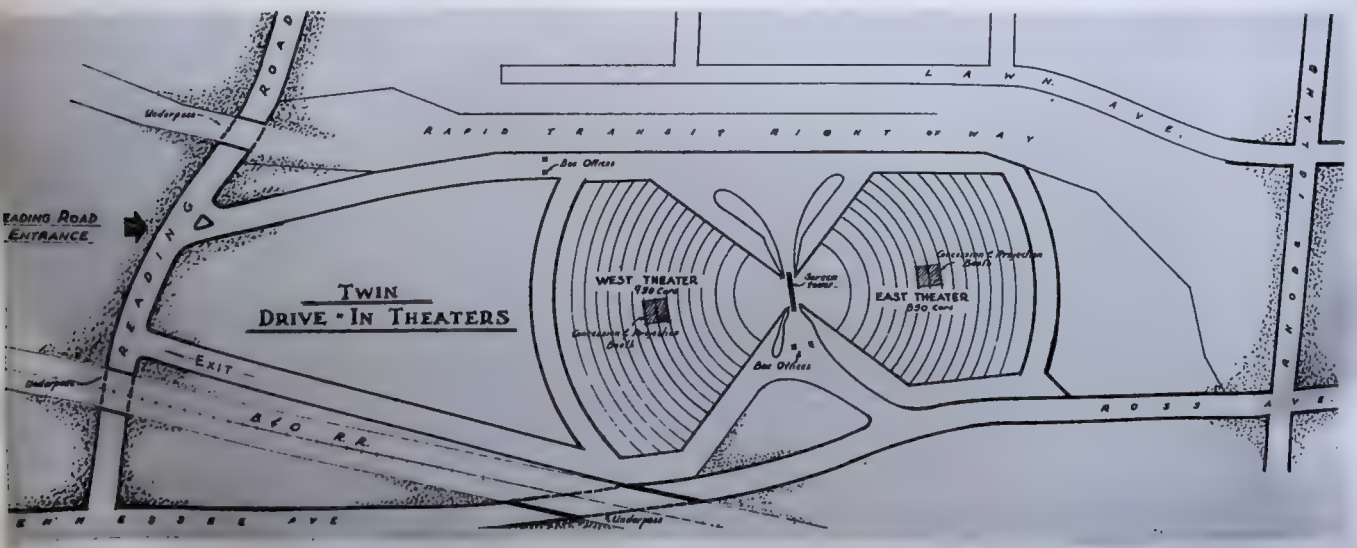


A TOTAL OF 800 SEATS for walk-in patrons have been provided. The concession room, housed with the projection booth in the cinder block building behind, has an asphalt tile floor and walls painted in maroon and mulberry with Formica trim and wainscot. Toilet rooms are the same.



PLAYGROUND EQUIPMENT is visible behind low fence in front of screen.

PLOT PLAN SHOWS how each theatre functions as an entity in itself.



Drive-In Theatres of Today and Tomorrow

Better Construction, More Spirited Showmanship, and Linking with Other Forms of Entertainment Predicted

By GEORGE M. PETERSEN
Drive-In Theatre Consultant and Designer
(Paper presented originally at the TESMA-TEDA CONVENTION, September 28, 1949)

BRIEF: *After reminiscing briefly on the "Genesis" of the drive-in . . . when there was no "moonlight" . . . or good exhibition, parking, rest room, concession facilities either, for that matter . . . the author draws on his vast wealth of experience to present what he deems to be the good points and flaws of today's ozoner . . . in all its Gargantuan stature and grandeur.*

Since every human undertaking whose fibres are essentially sound . . . and the drive-in has proven itself to be so . . . has a future as well as a past and present . . . a look into the crystal ball is a stimulating experience . . . It is difficult to say, of course, exactly what lies over the horizon for the drive-in of today . . . but perhaps we have a subtle clew in the outdoor which recently added a cage of monkeys to its side attractions . . . Man is said to have evolved from the apes . . . so perhaps the drive-in is still in its own "monkey land." It may become the heart of new metropolitan shopping centers . . . or may replace the old village square as a popular place for public gatherings . . . Only time will tell.

YESTERDAY'S DRIVE-IN

The Drive-In Theatre of Yesterday is mentioned solely to call attention to the great advances that have been made in this type of entertainment during the past ten years. We can all recall the ramps covered with loose slag or crushed stone; make-shift rest room facilities; concessions that were designed as a convenience to the patrons rather than as a money-making side line for the exhibitor; the old central sound that blasted its way through the ozone for many miles; the six-year-old pictures with patched prints and mutilated sound tracks, and many other of the early day features that are amusing at this period of drive-in theatre construction.

Slipshod Facilities

We can also recall the development of the sound systems from the old central sound, through the underground speakers, the overhead speakers, the bi-car units; and, finally, the in-car speakers that are in use at the present time. We remember that the ramp area was in darkness throughout the running time of the picture, and we do not have to strain our memories too hard to recall the little frame sheds that frequently housed the so-called "concessions" that sold bulk ice cream, steamed hot-dogs, popcorn, bottled soft drinks and a few candy bars. We can also see the price-tag on these early operations, and they were usually less than the cost of the equipment alone on the present day drive-in theatres.

TODAY'S OUTDOOR

The drive-in theatre of today shows great improvements over those original jobs of yesterday, from which we learned what the public wanted and what we could expect from the drive-in's investment standpoint. These improvements are due, largely, to the fact that many of the more recently erected drive-in theatres have been built closer to, and in many instances within, the corporate limits of the larger municipalities, so that an attractive type of structure was demanded by the local authorities before they would issue a building permit. In other instances, the exhibitors realized that this type of entertainment had become a permanent, and an integral, part of the motion picture industry and that the surest way to block out competition was by the erection of first-class drive-in theatres that would discourage the "quick-dollar boys" from trying to crowd into that particular location.

Physical Embellishment

These facts were, and they still are, largely responsible for the attention now being given to architectural appearance; elaborate neon signs; transparent changeable letter marquees or attraction boards; stabilized ramp surfacing; larger and better equipped concessions; tiled rest rooms, with steel stall partitions and doors; attractive landscaping, and many other minor refinements that appeal to the drive-in theatre patrons.

There have been but slight changes in the general arrangement of the drive-in theatres throughout the years with the single exception of the Twin Drive-In Theatres in Chicago. This twin idea has been duplicated in several locations, whether by the same designers or not I do not know, but the fact remains that this original Twin is undoubtedly the best money maker in this country, and it is claimed that grosses of $40,000 to $50,000 per week are just normal business—more than is grossed by most of the Loop theatres.

Equipment Improvements

In addition to the advances that have been made in the structural and architectural design of The Drive-In Theatre of Today, there have also been great improvements in the mechanical equipment that has been developed for this specific type of entertainment. Such items as in-car speakers; various methods of lighting the speaker posts or the ramp area; signal lights for calling the concession car-hops; "Moonlight" floodlighting of the ramp area during the running time of the picture; water-cooled carbons for the projectors; aisle lighting, and the development of the concession business into a real money-making branch of the drive-in theatre industry.

There are also several types of heater units that can be placed in the automobile on cool evenings, and I, personally, have spent considerable time and money in an effort to cool the drive-in theatre on the exceptionally hot summer nights. These various cooling devices were all successful but proved too costly for the average drive-in. The latest method appears to meet all of the requirements, and it is likely that the final tests, and cost figures, will be completed within the next sixty days. Several methods of mosquito control also have been experimented with for use in the comparatively few locations in which these pests are especially annoying.

Stereotyped Appearance

A considerable number of very attractive drive-in theatres were erected in the years 1947 and 1948, but, through some strange circumstance, the general run of the drive-ins erected in the year 1949 have been definitely lacking in eye-appeal. They appear to have been erected just for "this year's business" and with no thought of future developments that will cause them to be outmoded within a couple of years.

Though I have not seen all of the drive-in theatres that have been erected during the past year, I have seen a sufficient number of them to realize that the prefabricated towers are the cause of the monotonous and uninteresting appearance of many of these operations—they all look alike and have no individuality. This remark is not intended to be detrimental to the prefabricated towers in any way as they are, for the most part, structurally correct. I do wish to emphasize that the majority of these structural frames should be used only as a foundation for architectural embellishment that will provide each drive-in theatre with an individuality that is so essential to good showmanship. Such architectural treatment will not increase the construction cost by any large amount, but it definitely will give character to each job and remove the "production line" appearance. No exhibitor would consider the idea of leaving the steel framework of a conventional type of theatre exposed to the public view; he has it covered with some ornamental material that is attractive and pleasing to the eye, so why not treat the structural frame of a drive-in theatre in the same manner?

One of the higher type drive-in theatres of today is the one recently completed in Honolulu for the Consolidated

Amusement Company. This theatre is within the city limits and has its entrance and an exit from Kapiolani Blvd. with its main exit on Kalakaua Avenue from the rear of the site.

The subsurface formation of the Hawaiian Islands consists of about an eighteen-inch thickness of coral, and the action of this coral under heavy and concentrated loads is rather unpredictable. As both the Screen Building and the Projection-Concession Building are of masonry construction, it was, therefore, deemed advisable to provide piling foundations for them. Since no wood piles were available locally, we were forced to resort to concrete piling.

The general arrangement of this theatre is typical of many of the better drive-ins, but the view of the surrounding landscape as seen from the ramp area is particularly noteworthy. It is a beautiful background indeed. I am not at liberty to mention the actual construction cost of this theatre, and I use it as an example merely because of the fact that no expense was spared to provide every possible comfort and convenience for the patrons.

Poor Construction

Those of us who are continually endeavoring to improve the type of construction used for the erection of Drive-In Theatres are becoming concerned over the present day trend towards cheap and antiquated types of construction which are being used on a large percentage of the 1949 projects.

While in New England recently, I found that four of the new theatres were built with telephone poles—a type of construction that has been popular in the South for many years but has not been used in our Northern areas. Also, a short time ago, I was shown a drive-in theatre, in Western New York State, that was constructed of scrap materials and whose screen building was covered with black slater's felt with a sloppy home-painted "Drive-In Theatre" sign smeared across the front.

About the only solution to this problem of sub-standard construction is that of state control and a construction code. Just how effective even that will be remains to be determined. New York State is probably the first one to enact a building code covering drive-in theatres, yet here is one of the very poorest type of construction that I have ever seen, and it is located in New York State.

Therefore, in the Drive-In Theatre of Today we have a paradox—we find both the highest type and the lowest type of construction being carried out at the same time and in approximately the same general locations. It is my personal opinion that equipment manufacturers and dealers could, and should, use their own influence to direct their customers into the higher type of jobs for their own future benefit.

TOMORROW'S OZONER

To predict just what the Drive-In Theatre of Tomorrow will be is a problem for a Superman to solve. There are, however, two definite conditions that will have to be taken into consideration. First, there must be some means of increasing the net profit in a legitimate and ethical manner, and, second, more attention should be given to the promotion of drive-in theatres in the smaller communities.

The Profit Problem

Many ideas for increasing the net earnings of drive-in theatres have been tried in the past and most of them have been abandoned. Far too many of these so-called "innovations" have been positively ludicrous and have merely proven that a large percentage of exhibitors have no idea as to the true functions of a drive-in theatre. The problem cannot be solved through "give-aways", "free pony rides", "square dances", "sack races", and similar stunts—these stunts only have a tendency to cheapen the entire drive-in industry. When an exhibitor has to resort to stunt nights to drag in business there is something definitely wrong with his ability as a good showman.

Selling the Drive-In

Let us all endeavor to elevate the status of the average drive-in theatre to a higher plane by eliminating free "Circus Cutouts"; the "Spooky" cards; the "Sheriff Badges"; and the "Comic Books" which can be obtained free of charge to the exhibitor from various manufacturers. Let us cease to advertise the other fellow's merchandise and start selling our own product—the product in which our cash is invested—a strictly high class drive-in theatre.

Reports from practically all sections of the country indicate a continual decrease in the earnings of both the conventional houses and the drive-in theatres. Whether this decline in business is due to 124 reissues during the past year and generally inferior product; too high admission charges; to the general business recession; to lack of effective ex-

OUTSIDE CONTINENTAL U. S. A. this deluxe drive-in in Honolulu, T. H., is the first to be built and it was designed by Mr. Petersen. Framed by the scenic beauty of the Koolau range and facing the renowned Diamond Head, this 770-car gem posed many unusual construction problems. The 54x42 screen is 90 feet high and the equipment includes Simplex projection, sound and speakers and Peerless lamps.



ploitation; to inefficient publicity, or to any other cause, the fact remains that it does exist.

Leading conventional theatres in many of the larger communities have met this condition by reverting to the old style vaudeville programs in which the movie is just another act instead of being the main attraction. This action appears to appeal to the movie patrons, and it is probable that an expansion of the vaudeville programs will force the producers to provide a higher class of product at reduced film rentals.

The drive-in theatres are not equipped to properly present vaudeville acts, but a few of them are trying to get away with it. Many theatres are admitting children free of charge, and that action shows a tendency toward a panic on the part of such exhibitors. One of the biggest mistakes being made today by the drive-in theatres is the practice of admitting children free of charge. They cannot go to an indoor movie for free, so the drive-in patrons get the idea that the operation is sub-standard, and they, consequently, stay away from it. The real solution to the drive-in theatre problem, in my opinion, is to combine with other type of entertainment, or amusement, that will help carry the overhead.

It is also my personal opinion that the financially successful Drive-In Theatre of Tomorrow, when erected in the vicinity of the larger metropolitan areas, will be built in connection with dance floors, swimming pools, ice skating rinks, cocktail lounges, restaurants, and other popular types of entertainment. We are working on just such a development at the present time but, for obvious reasons, the actual details are not being broadcast at this time.

The Smaller Community Drive-In

The Drive-In Theatre of Tomorrow, in the smaller communities, however, is another story. Years ago it was generally assumed that communities of less than one hundred thousand population were unprofitable locations for drive-in theatres. The passing years have proven this assumption to be incorrect, as there are some fourteen hundred drive-in theatres, and there are only one hundred cities of more than one hundred thousand population.

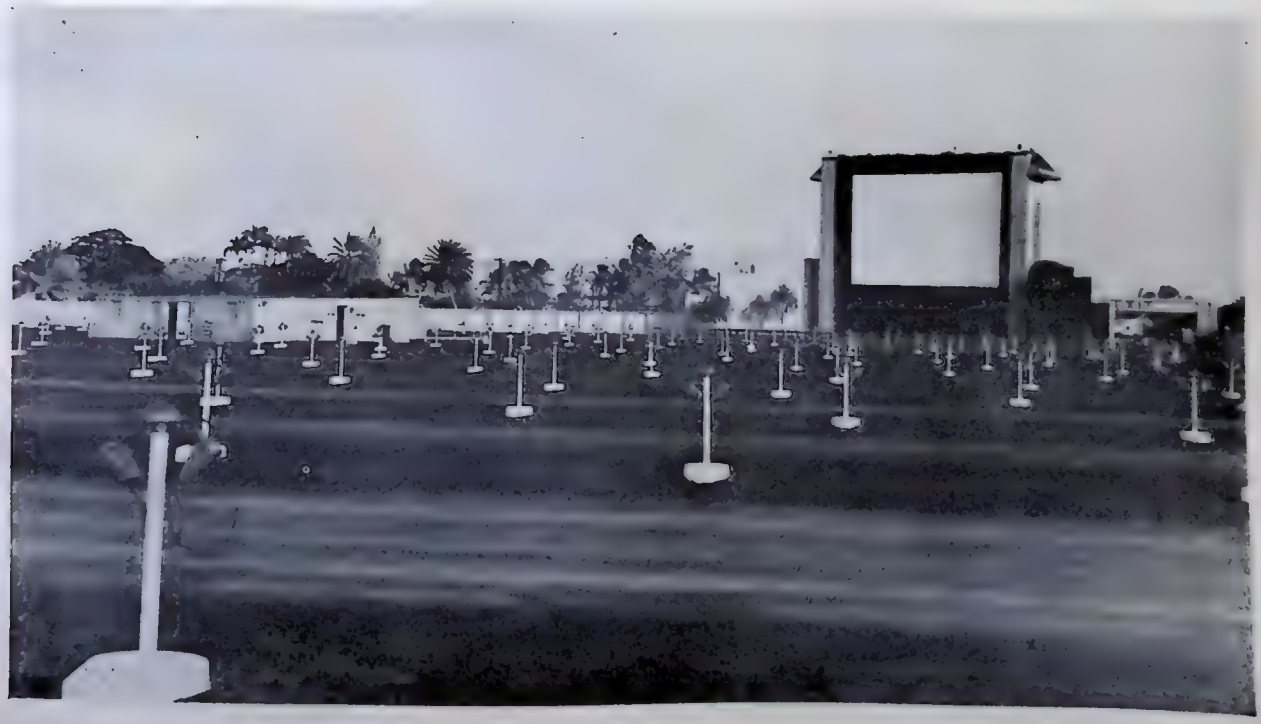
It appears to me that the exhibitors in the smaller communities who are complaining about the lack of easy money, which was prevalent during the war years, should stop whining and start to do something to promote business—and I do not mean "give-aways". Let them show some evidence that they still possess some good old-fashioned showmanship. Let the exhibitors develop something original that will force the potential patrons to a realization of the fact that they are definitely missing something worth their while by not attending the drive-in theatres. There are many ways of creating this feeling on the part of the prospective patrons, and the following suggestions cover only a few of them that have been tried and proven successful.

One excellent method of creating goodwill, and incidentally obtaining exceptional free publicity, is to donate the use of the theatre to the various churches in the community. Give each one of them a Sunday morning during the season. The collection can be taken at the ticket office with the entire amount going to the church. Each church can provide its own musical recordings that can be played on the non-sink, and the sermon can be delivered over the public-address system. In many instances arrangements have been made with the local broadcasting companies to put the service on the air and additional publicity for the theatre is obtained. The same kind of operation can be given with Sunday afternoon vesper services at which recordings of the more popular oratories may be reproduced.

In the smaller communities there can be early evening "pop" concerts, at which admission may be charged and concession items vended during the concert. Then there can be local talent boxing shows; wrestling matches; dancing competitions; and many other attractions of a like nature. These additional programs can be included in the admission price to the show, or a slight additional charge can be made.

The majority of drive-in theatre operations will have to provide additional facilities before putting on this type of entertainment, but the comparatively small investment required for a stage, additional seats on the first ramp, etc., will be rapidly amortized through the additional income and the free publicity that will result. The first ramp will permit the installation of approximately 1500 seats and if the exhibitor so desires, some of these seats may be of the portable type that will permit the use of the ramps for automobiles when the stage attractions are not presented.

Some excellent locations have been ruined through over-development in the drive-in theatre field, and the outstanding example of this is a city in Ohio in which there are nine drive-in's for less



A RAMP VIEW of this Honolulu, T. H. theatre designed by Mr. Petersen indicates the orderliness gained from white painted speaker posts against the finished ramps. The large screen tower is roofed with glazed green tile and the ramp area is fenced with seven foot high Flex-board. A bench area provides accommodations for 200 walk-ins. Owned by Consolidated Amusement Co.

than three hundred thousand population. This situation has developed a cut-throat type of competition that prevents any real money from being made in the area.

To be sure, there is considerable difference of opinion as to the desirability of drive-in theatres in the smaller communities, as will be illustrated by the following examples. The first opinion is from an exhibitor who has operated one drive-in theatre for a short period. The second example is not an "opinion", but is an actual case history, from my own files of more than one hundred thirty operations.

A while ago one of the popular trade publications carried the following story:

"On the heels of a warning to exhibitors regarding investment in small community drive-in theatres, additional evidence is coming to light that the going is tough for many of these ozoners. Curtailment of small-town drive-in operations and the abandonment of a number of previously announced such projects reflect the condition.

"In a town of 15,500 population the drive-in theatre is owned by the owner of the town's two conventional theatres, and the drive-in has been cut to one show a night.

"The owner says that he is reducing the drive-in's capacity from 423 cars to 33 cars. He points out drive-in operating costs that cannot be reduced or eliminated, with diminishing returns."

A situation of this kind may be caused by one of several reasons. The physical construction of the drive-in theatre may not appeal to the potential patrons. The theatre may not be properly operated. The type of pictures may not appeal to the drive-in patrons. Not one of these probable causes for an unsatisfactory operation can honestly be charged against the drive-in theatre type of entertainment. They are the result of inexperienced planning, indifferent, careless or miserly operation, or a lack of investigation as to the type of pictures the patron desires. A large percentage of drive-in theatre patrons prefer Westerns or Musical Comedy, and many films that prove satisfactory in the conventional theatres will do little or no business in the drive-ins.

Several dealers throughout the country have informed me that some of the distributors are advising exhibitors to build only 200 to 300-car drive-in theatres. It is a well-known fact that the average 200-car operation has a struggle to break even although, on the other hand, some of these small theatres do produce a satisfactory net. It is my personal opinion that this so-called advice is given solely in an effort to discourage additional construction of the drive-in type.

It is also a recognized fact that the owners of conventional theatres, as a class, are exerting all of the influence at their command to prevent the issuing of building permits to drive-in theatres, and to date they have been fairly successful in their efforts. In the face of the ever increasing acknowledgment that the drive-in theatres are the training schools that educate the non-picture minded and develop them into regular patrons for the indoor houses, this attitude appears to be rather a short-sighted one.

Just to show what has actually been done in one of these smaller locations, I wish to call your attention to the case history of a 200-car drive-in theatre located within fifty miles of New Orleans. This particular theatre is in its third season of operation and is located near a town of only 3000 population. There is only one paved highway, and after a heavy rain the dirt roads are impassable. Against my advice, the owner of this theatre decided to proceed with the construction, and we completed the entire job, using central sound and rebuilt equipment, for less than $15,000.

This is strictly a family operation from the manager down through the cashier, projectionist, ushers, and the concessionaire, and each employee draws a weekly salary. This theatre is definitely a "dog" when compared to the average Northern job, but I have seen worse ones in the North. At the end of each season this tiny operation, in a town of 3000 population, shows a net earning of from $6,000 to $7,000, which is an excellent return on the investment. Such earnings appear to be only "eating money" to many of us, but we cannot minimize the fact that any investment that shows a consistent earning of better than forty per cent, net, can hardly be termed a failure.

It is my personal opinion, predicated upon my own experience with some 130 owners of drive-in theatres, that approximately thirty per cent of such owners either take advice from persons who know nothing about such operations, or they have some weird ideas of their own that they insist upon using. These are the drive-in theatres that either fold up completely or that fail to produce a fair return on their cost. Strange as it may seem, the majority of drive-in theatre failures are exhibitors who own, or have owned, indoor houses. The novice in the drive-in field pays for capable advice and then follows it to the letter.

I have been interested financially in more than twenty drive-in theatres and, although not an exhibitor, I can figure net earnings along with the best of them. On the basis of the experience gained on these theatres I feel safe in stating that, for the larger net earnings per dollar invested, the 500 to 700-car drive-ins in the communities of from 35,000 to 50,000 population are the real money-makers.

The Patron Segregation Problem

Many exhibitors request information as to segregation of the patrons in the Drive-In Theatre of Tomorrow. Most indoor exhibitors know the answer to this problem, but to others it presents a real difficulty. The Supreme Court of the United States has twice ruled that the Federal Segregation Law was unconstitutional, as the racial question was one for the States to decide—not for Congress. Fundamentally, it held that the Fourteenth Amendment to the Federal Constitution does not endow Congress with power to legislate upon subjects which are within the domain of state legislation.

One method used to segregate the whites and the colored, when state laws permit, is to provide one or two ramps at the rear of the drive-in theatre for colored only, and to provide a small concession and rest rooms for the use of the colored patrons. There is little objection, on the part of the whites, to the colored parking on the ramps, but a large percentage of the whites do object to using the same concession and rest rooms with them. We all realize that this is really a tough problem to solve, so all that can be done is to work out the best solution possible and keep within the law.

THE CONFECTION STAND is important on mainland or island. Modern, well equipped and neon lighted, this is the snack-bar at the Honolulu theatre.



Site Selection and Layout Planning

Certain Basic Elements Rate Priority Attention In Choosing Location and Sketching Blueprints

By GEORGE M. PETERSEN
Drive-In Theatre Consultant and Designer

BRIEF: *A good and profitable drive-in . . . like Rome . . . cannot be built in a day . . . A site must be chosen . . . and a layout planned . . . on the basis of which location of those under consideration offers the greatest number of advantages . . . and the fewest disadvantages . . . both natural and man-made . . . A searching investigation of all factors involved should be made before a spade of earth is turned . . . By doing so the operator will save himself a lot of unnecessary grief .*

The suggestions for site selection and layout determination . . . as set forth below by an experienced expert . . . should serve as a useful paddle to prospective outdoor exhibitors . . . when they make their first attempts at "shooting" the tricky rapids of drive-in theatre construction . . . A number of worthy and typical plans . . . which have been used successfully . . . are also presented for study and guidance.

After the exhibitor has determined the approximate car capacity he desires for his drive-in theatre, his next act is to locate a site for his project that will come fairly close to meeting his requirements. Few sites will be found that will have all of the features desired as listed below, so the only method of determining the most desirable location, provided more than one is available, is to evaluate the various features, both for and against each site, and decide upon the one having the most points in its favor.

Contrary to general opinion, a much better deal can usually be made by retaining the services of an experienced, honest, real estate agent to negotiate the option for the property than can be made by the layman himself. The agent's commission is paid by the seller, and the agent can not only save the exhibitor considerable time but can also make a better deal, as he is familiar with the land values and the persons from whom he must purchase.

Site Factors

The important features to be considered when selecting a drive-in theatre site are as follows:

1. Site of sufficient size.
2. Automobiles to park facing the westerly direction.
3. General slope of land.
4. Natural aids to drainage.
5. Type of highways available to site.
6. Proximity of railroad grade-crossings.
7. Number of traffic lights to be passed by the majority of patrons.
8. Distance from center of potential patron area.
9. Surrounding neighborhood.
10. Power supply available to site.
11. Public utilities available to site.
12. Zoning for drive-in theatres (business or commercial).

Calculation of Size

The average prospective exhibitor shows a woeful lack of understanding as to the dimensions of the land required for a drive-in theatre. A rough guide to be used for determining this important item is to allow one hundred feet in width, or highway frontage, for each one hundred cars capacity. The actual depth required will be about as shown in the following schedule. These depths are figured from the face of the screen building to the rear of the last driveway. To these depths must be added the distance from the highway to the face of the screen building.

DEPTH OF DRIVE-IN THEATRES

No. of Ramps	Car Capacity	Depth in Feet
10	492	505
11	576	543
12	668	581
13	764	619
14	866	657
15	986	695

On the majority of jobs the chief objection voiced by the Highway Authorities against drive-in theatres is the congestion of traffic caused by the inbound cars. The simplest way to avoid this situation is to place the screen building and/or ticket office as far from the highway as possible, so that there will be plenty of "holding area" in which to park the cars until they can pass the ticket office. A setback of 200 feet is practically mandatory, and there are a large number of drive-ins that set back from 300 to 800 feet. Whatever this setback is, it must be added to the depth shown in the schedule, as mentioned previously. Many states are passing, or anticipate passing, codes to govern this situation, so it is well for the exhibitor to count on such action and provide for ample "holding area" when he first plans his drive-in.

Face Cars West

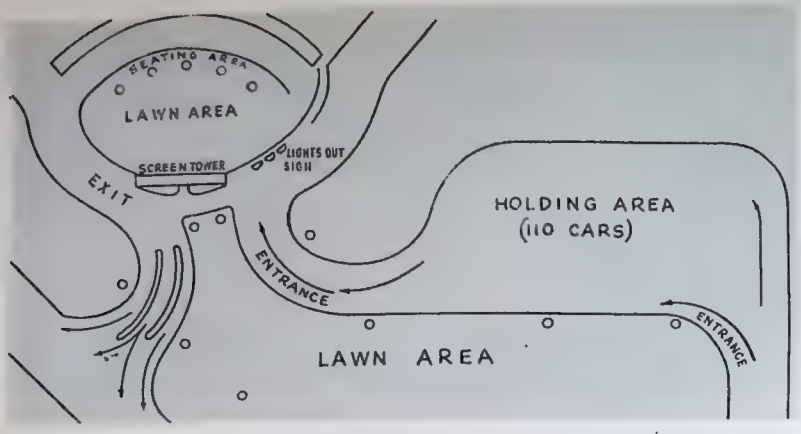
Since the summer sun sets at a comparatively late hour, especially in localities where Daylight Saving Time is in effect, it is advisable to take any measures possible which will shorten this delay in starting the show. Facing the cars to the west will lop from twenty to thirty minutes off the enforced waiting period, for the screen building will act as a natural shield to darken the screen.

General Slope of Land

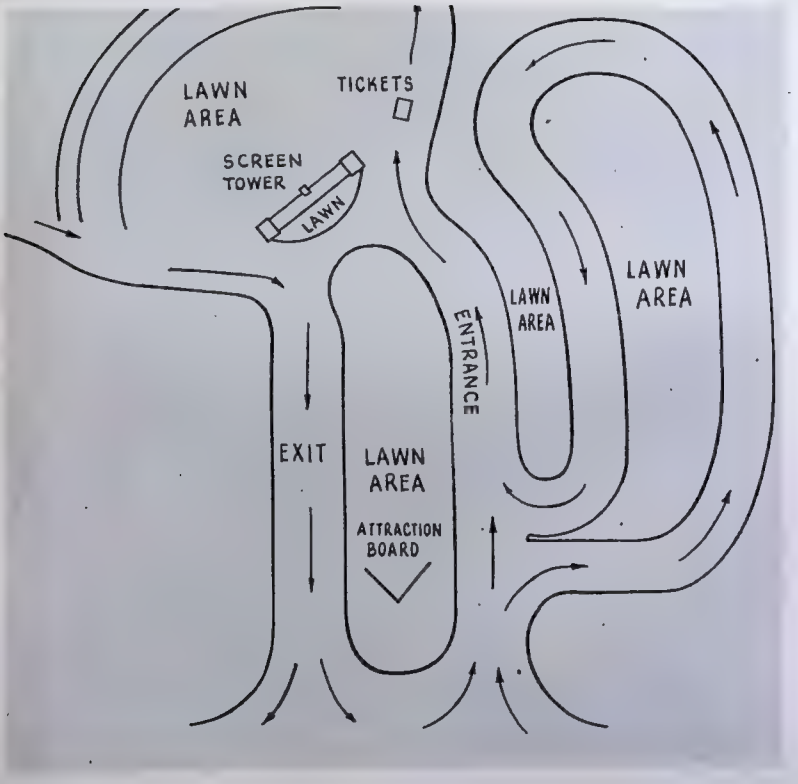
The grading, or shaping, of the site is figured on a unit cost per cubic yard of material used. It stands to reason, therefore, that the site which most closely conforms to the finished grade is the

Figure No. 1.

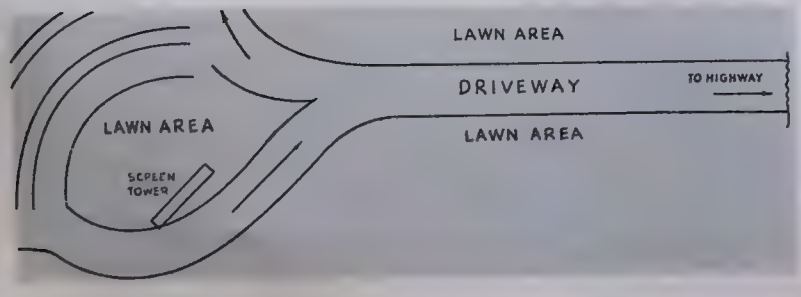




ABOVE: Figure No. 2. BELOW: Figure No. 3.



BELOW: Figure No. 4.



most economical one to purchase. A site which rises slightly to the rear is the easiest to ramp, although practically any site can be used, if cost is not a factor of major importance.

Natural Aids to Drainage

Inasmuch as a properly surfaced drive-in will not permit water to be absorbed into the ground, surface water must necessarily be carried away by natural drain-offs such as brooks, creeks, swales, sink-holes, ditches, or some other means which will do a thorough job of removing water from the ramp area.

Highways Available to Site

There exists a considerable difference of opinion as to the type of highway best suited to the needs of drive-in theatres, but the writer believes that a secondary highway in close proximity to a main highway is the most desirable.

Grade Crossings

Grade crossings en route to the theatre should, as a rule, be avoided in selecting a drive-in site. An exception may, however, be made when crossings are located on a straight-away section of the highway and are readily visible.

Traffic Lights

Since people out for a pleasant drive do not enjoy passing through a number of traffic lights, they should be avoided insofar as possible when a site is taken under consideration.

Proximity to Center of Patron Area

The question as to whether or not a drive-in theatre should be close to the heart of a town or a short distance away is another subject around which considerable controversy has raged. Normally, however, the best location is from three to five miles from the nearest community.

Surrounding Neighborhood

It is usually wise to keep away from "high-toned" neighborhoods when planning a site because residents of such districts are extremely prone to complaining about drive-in operations. Cattle barns, slaughter houses, pig-pens, chicken ranches, fertilizer works, and other types of industry that will cause unpleasant odors to be carried into the theatre, should also be carefully avoided.

Availability of Power Supply

The availability of 220-volt, three-phase current should be checked, as should also the transformer capacity. In many instances, it is necessary to provide larger transformers for the arc lamp and other power equipment.

Public Utilities

As a general rule, public utilities are seldom available to drive-in sites. On comparatively rare occasions, however, they are.

Zoning for Drive-Ins

It is imperative that the builder assure himself that the zoning is in order before any work involving expenditure of money is started. The prospective drive-in operator should be fully aware that indoor exhibitors will frequently do everything

within their power to prevent the issuance of a permit for building a drive-in operation.

Illustrative Examples

Practically every drive-in theatre presents a special problem when it comes to planning the general layout. (This statement does not hold true on the "production" jobs that are being erected by the dozen throughout the country at bargain prices. These jobs all have the same so-called "plan.") The following entrance plans are shown in the hope that the prospective exhibitor may find one that can be adapted to fit his specific site:

* * *

Figure 1 illustrates what might be termed a "natural" so far as the means of ingress and egress are concerned. The intersecting highways are joined by an arc having a radius of one hundred feet. The entrance drive originates and the exit drive terminates on this radius. Due to the fact that a large percentage of the patrons live in communities to the left of the main entrance, an additional exit drive is located so as to detour this group away from the main exit and relieve the congestion at the main intersection.

* * *

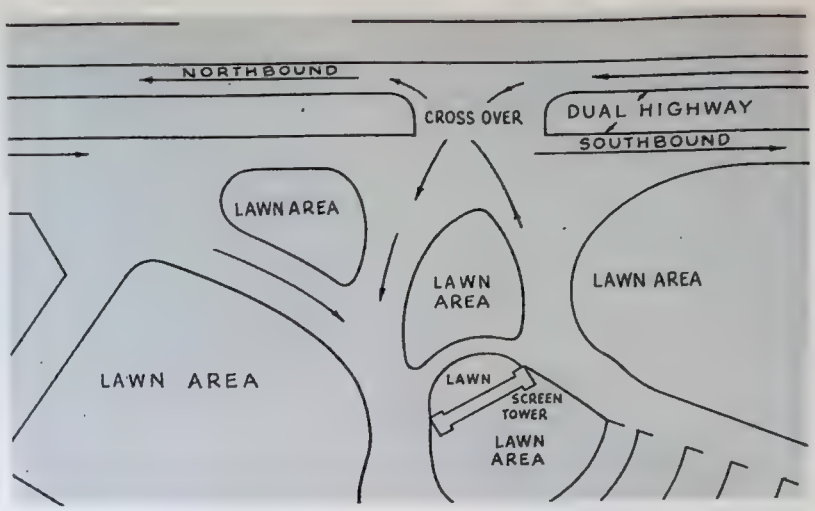
Figure 2 shows an entrance-exit arrangement that has proven satisfactory for theatres that must be located close to the highway. On this particular site, the screen building is set at an angle to the highway, and the highway department requested a "holding area" with a capacity equal to fifty per cent of the capacity of the theatre. However, this condition was waived when "Note 1" was placed on the drawing, binding the owners to increase the capacity of the "holding area," beyond the 110 cars, whenever the highway department deemed that such increase in capacity was necessary to prevent blocking the main highway.

* * *

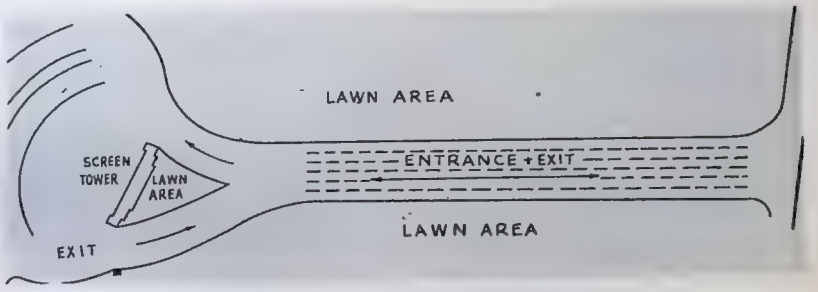
Figure 3 shows a plan which provides a long, winding entrance drive in place of a "holding area." The drive is of sufficient width, and length, to accommodate a sufficient number of cars between the highway and the ticket office, so that no congestion is caused on the highway. This is good practice when there is sufficient acreage to allow for its use. It should never be used on cheaply constructed operations, since the driveway and the plantings must be maintained in a first-class manner lest they detract from the appearance of the theatre.

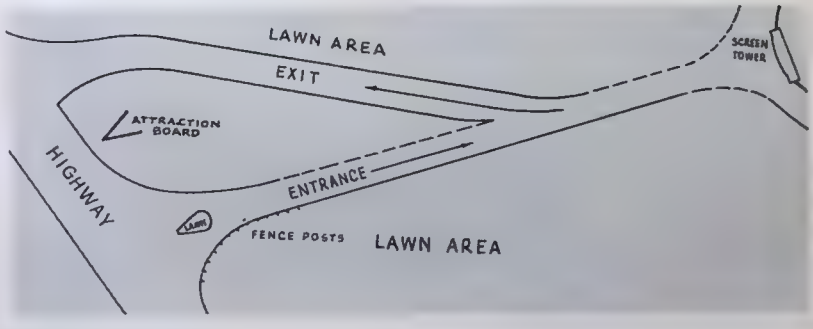
* * *

Figure 4 illustrates the trend toward locating many of the newer and larger types of drive-in theatres a considerable distance back from the highway, in order that the highway frontage may be used for income-producing commercial improvements. This particular theatre is set back 840 feet from the main highway, but the principle of the long drive remains the same, even though the actual length varies considerably. In a situation of this kind, a major portion of the cost of the driveway can be saved through the omission of any ornamental work on the face of the screen building. This structure, for example, is too far from the highway for any ornamentation to be effective from the road. An elaborate type of attraction board should be placed near the highway entrance, however.

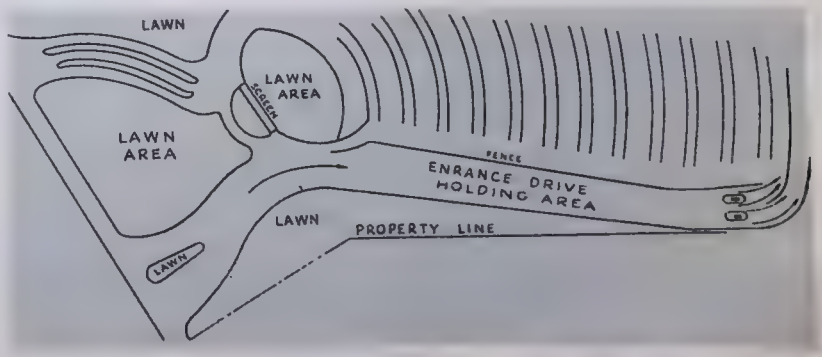


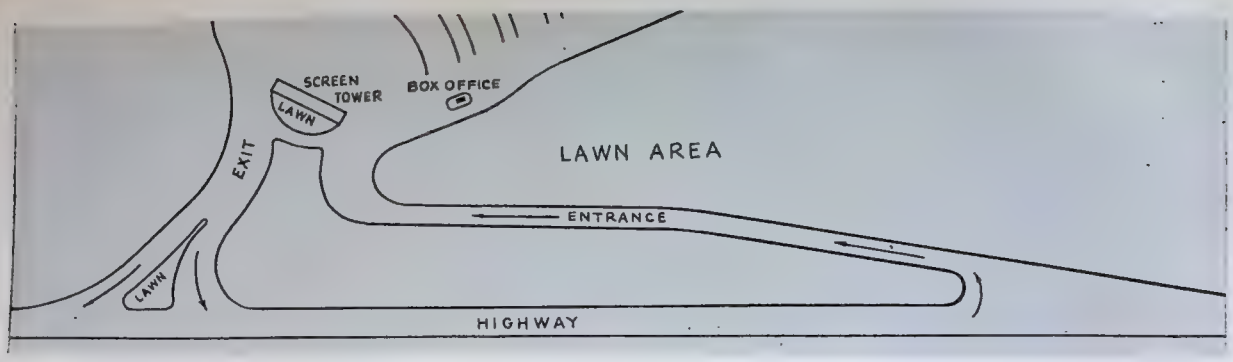
ABOVE: Figure No. 5. BELOW: Figure No. 6.



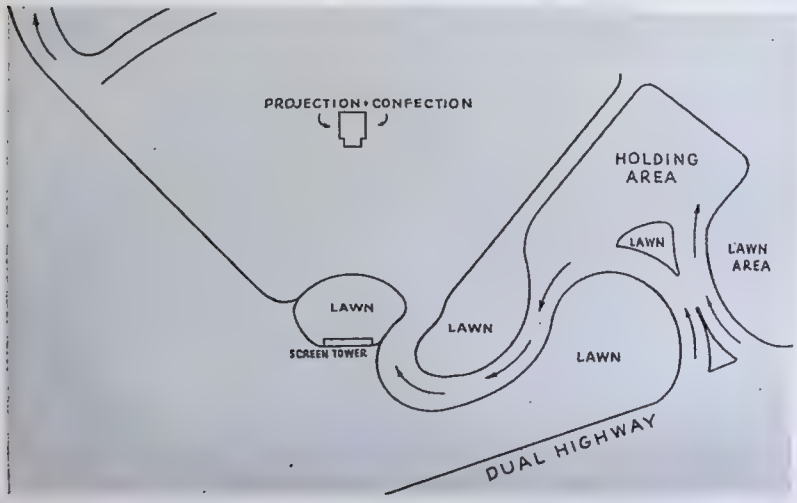


ABOVE: Figure No. 7. BELOW: Figure No. 8.





ABOVE: Figure No. 9. BELOW: Figure No. 10.



BELOW: Figure No. 11.

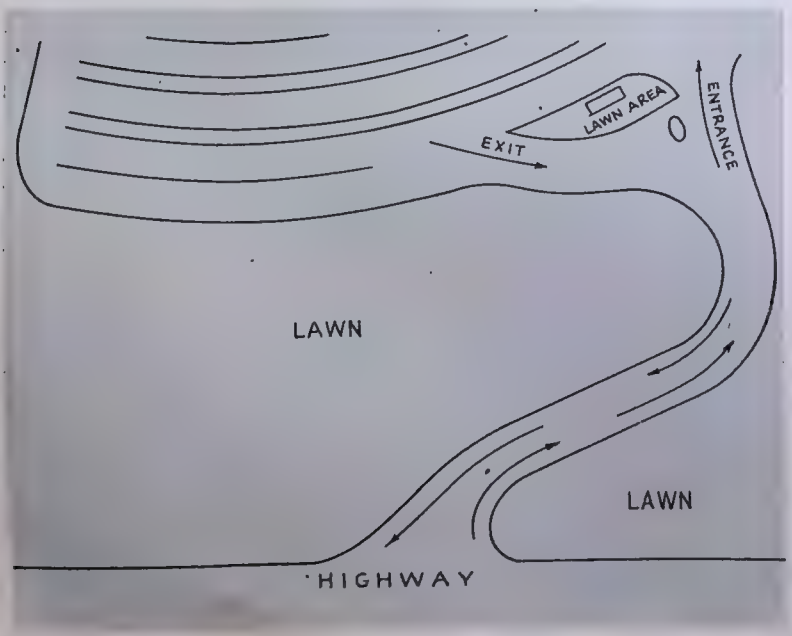


Figure 5 shows a type of entrance that is becoming more and more common. The theatre actually fronts on a divided highway at the intersection of a side road. Such a plan permits the use of two entrance drives and can usually be of sufficient length as to provide enough parking space to remove the necessity of constructing a "holding area."

* * *

Figure 6 demonstrates a plan that comes as near to being a "standard type" as any in use today. The entering and departing cars use the same driveway. This plan is perfectly practical, if the driveway is marked off into six lanes, each ten feet wide. Thus, when the theatre is being filled for the first show, the entire drive area can be used for entering cars. At the break of the first show, four lanes are used for exit and two for entrance. At the break of the second show, all lanes are used for exit.

* * *

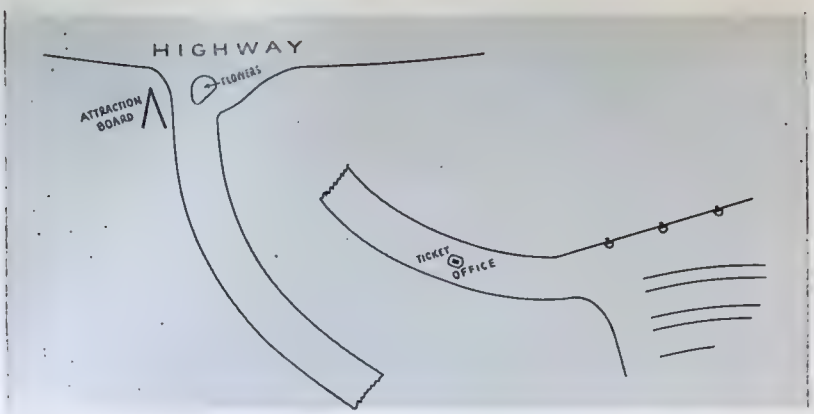
Figure 7 provides another example of a theatre located better than six hundred feet back from the highway. In this particular location, the majority of patrons turn to the right as they leave the site, and for that reason the exit drive is placed as shown.

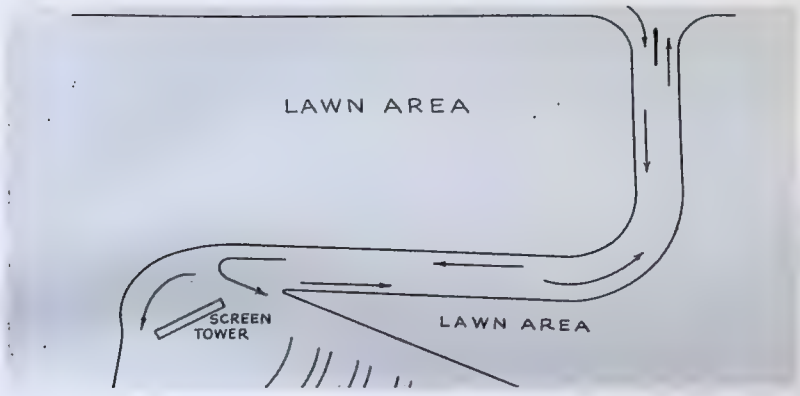
* * *

Figure 8 indicates the growing popularity of placing the ticket office at the rear end of the entrance drive. Such an arrangement allows the entire depth of the drive to be used as a "holding area" without the additional cost of preparing such an area. The only construction change needed to make such use of the entrance drive is the placing of a tight fence at the end of the ramps, instead of at the outside edge of the drive. The edge of the drive can then be outlined with a hedge, flowers, or shrubs.

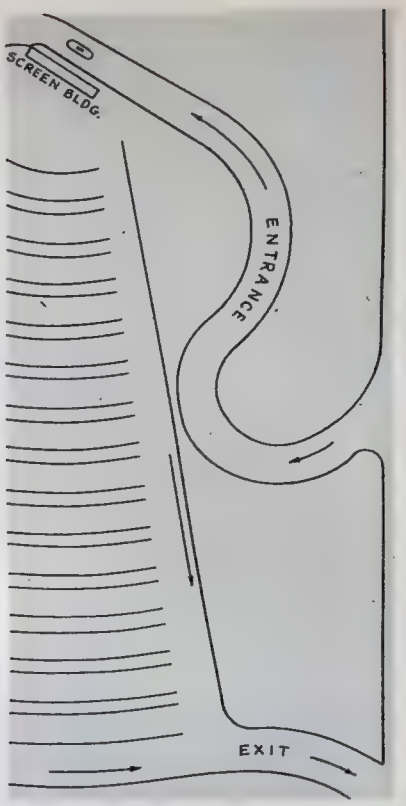
* * *

Figure 9 shows an operation in which a concrete highway, abandoned when a new, shorter highway was constructed, constitutes the entrance road. The owner was fortunate in securing approximately seven hundred feet of concrete highway, sixteen feet in width, without spending a single dollar. Needless to say, this is the only known job of its type. It is depicted merely as a reminder to prospective owners of drive-in theatres that they should always keep an eye open for an outstanding proposition that will increase the value of their investments and, at the same time, reduce the cash outlay.





TOP: Figure No. 12. BOTTOM: Figure No. 13.



ABOVE: Figure No. 14. BELOW: Figure No. 15.

Figure 10 illustrates a somewhat unusual, but not uncommon, plan with respect to the type of entrance, "holding area," and the fact that the exit drive leads from the rear of the theatre onto a side road. Outbound traffic can thus be divided into the various lanes by a traffic light located at the intersection of the main highway and the side road. This has proved to be a very satisfactory arrangement for locations on which it can be used.

* * *

Figure 11 exemplifies another instance of a case where a "typical" plan could not be used. The site grades down from the main highway so rapidly as to place the property line in a deep pocket. This circumstance demanded that the entrance and exit be from the rear of the theatre.

* * *

Figure 12 depicts a site where the highway is about fifteen feet lower than the front of the property and, from the owner's point of view, this highway frontage is very valuable. To keep the cost of the land to a minimum, therefore, the exhibitor only purchased a narrow strip along the highway and developed his theatre on the less costly land at the rear of the property. Such types of construction, as previously mentioned, are becoming more and more common.

* * *

Figure 13 furnishes another example of a drive-in theatre placed at the rear of the site, so that the highway frontage can be sold at a higher price for other types of improvements.

* * *

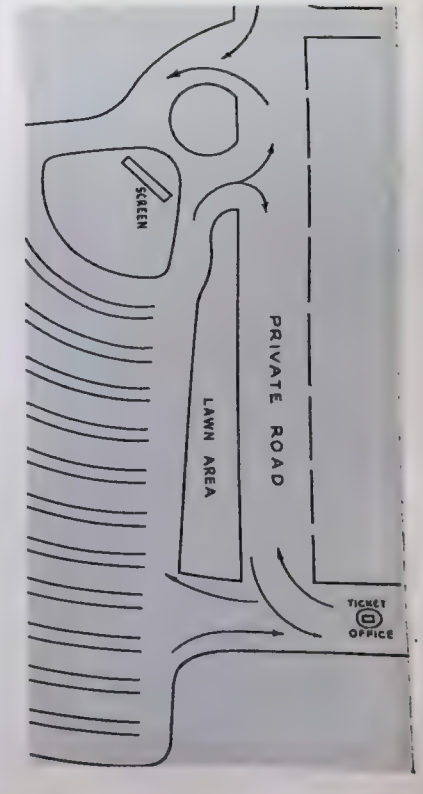
Figure 14 shows another plan that is similar, in a general sort of way, to the plan shown in Figure 10. The actual "holding area" is not required, for the long entrance drive to the ticket office (located in front of the screen building) is sufficient parking area to prevent the cars backing onto the highway. The vast majority of the theatre patrons turn to the right as they leave the ramp area, so the exit from the rear of the site makes the control of traffic into the one lane, of a dual lane highway, easier than if both drives were used as exits.

* * *

Figure 15 shows a really unusual plan. Although the screen building is located at the intersection of two minor highways, which form an L at that point, the main entrance is toward the rear of the theatre (4th Street). Thus, there are actually two entrances and two exits.

* * *

The most important items to keep in mind when designing the entrance and exit to a drive-in theatre are to provide sufficient parking area, of some kind, to prevent the cars from backing up onto the highway while they are awaiting to pass by the ticket office and, also, to provide a safe and efficient means of getting the cars out of the theatre at the break of the show.



Zoning Regulations and Legal Decisions

A Report on Opinions, Rulings, and Ordinances Rendered by Various Legal and Executive Bodies

The drive-in theatre as a commercial recreation enterprise has only come into its own during the last ten years. The mere handful which existed before the advent of World War II has now swollen to a plethora of outdoor theatres throughout every state in the nation, and they are still expanding at a furious rate. In spite of all predictions to the contrary, drive-ins have by no means reached their peak but, rather, are still in a transition period which shows no immediate signs of ending in the near future.

This phenomenally rapid growth of the drive-in has not been without its legal difficulties, among others. Caught unawares by the ever-rising number of outdoor theatres in their respective localities, many state, city, and municipal bodies have as yet failed to establish related and definite ordinances and rulings governing the building of drive-ins. The inevitable result has been a hodgepodge of conflicting regulations with seemingly few common denominators.

Such a lack of uniformity among the codes and by-laws of different localities regulating drive-ins is not quite so paradoxical as it seems at first when one remembers that legal processes often move painfully slowly in relation to general progress. The advance of the drive-in has been so rapid that the clanking machinery of the law has not been able to keep pace with it.

Until responsible legal bodies and courts have had ample time to establish a more concise and correlated pattern of regulations affecting drive-ins, there will be little uniformity in the codes and ordinances governing them. In the meantime, however, it seems worthwhile to examine the opinions of zoning authorities, the decisions of courts, traffic regulations, etc., in various sections of the country to ascertain the diversity of ways in which the problem is being handled.

The Planning Advisory Service of the American Society of Planning Officials recently completed an interesting survey on drive-in theatres which includes a vast wealth of material on the subject of legal ordinances and rulings. These findings form the basis for an informative study by both legal bodies and drive-in owners anxious to establish a set of rules for outdoor theatre operation which will be just and fair to all parties concerned.

BRIEF: ***Practically every new development in the history of mankind has met with opposition of some sort . . . either by those who feared their personal interests would be affected . . . or by parties too inherently conservative to welcome readily something new . . . The older generation of today can recall, for example, the violent resistance which the automobile first met in some quarters . . . The carriage makers fought it vigorously because they foresaw the ruination of their business . . . and a good many conservative citizens looked with horror on the "horseless carriages" . . . Progress is inevitable, however, and today the automobile is as an accepted a part of American life as the horse and buggy used to be.***

The drive-in theatre . . . in essence an entertainment by-product of the automobile . . . has had to face . . . in a number of instances . . . the same sort of opposition which the automobile did . . . Indoor theatre interests . . . in some cases . . . have attempted to block the construction of drive-ins in their territories, while . . . in others . . . community citizens and administrative bodies . . . often unduly alarmed by imaginary ills they believe to be connected with a drive-in . . . have barred them unreasonably.

It is true . . . of course . . . that drive-ins do present certain problems of traffic, sanitation, health, etc., which require that they be regulated to some degree in the public interest . . . On the other hand, any such legislation enacted, should recognize and serve the best interests of the theatre industry as well . . . Furthermore, it is desirable to strive for more uniformity . . . among state and municipal bodies . . . in restrictive measures governing drive-ins.

The following article . . . based on a report made by the Planning Advisory Service of the American Society of Planning Officials . . . surveys typical approaches made to drive-in regulation by several representative states and communities . . . Examination and study of the ways in which they have tackled the problem may well prove of value to drive-in owners . . . both present and future . . . who may be called upon to argue for just legislation in regard to their own rights.

Opinions of Community Officials

In the formulation and adjustment of legislation relating to drive-ins, local judicial bodies will quite naturally look to the experiences of other officials in approaching and solving the question of regulation. It is practical, therefore, to review a number of typical cases in order to study the ways in which those charged with the responsibility for settling the question have tackled it.

Below is the text of a letter written by Huber E. Smutz, Zoning Administrator, Los Angeles, November 15, 1949, at the request of the Planning Advisory Service:

"The problem of the drive-in theatre is a fairly new one, and hence there are very few zoning ordinances with which I am familiar which made any specific provisions for such drive-in theatres. Most zoning ordinances permit theatres in the business and commercial zone except perhaps in the neighborhood business zone. Unless the zoning ordinance specifically prohibits a drive-in type theatre or specifies that the theatre may be conducted entirely within a building, then I would say that any zone which permitted 'theatres' would also permit a drive-in theatre, provided sufficient land all in the commercial zone was available as a site for such a theatre. The Comprehensive Zoning Ordinance for Los Angeles which was adopted in 1946 permitted various amusement enterprises, including theatres in the C2 and less restrictive commercial zones, if conducted wholly within a completely enclosed building. As a result of this latter qualification, drive-in theatres were not automatically permitted in the commercial zones and hence, by ruling of the Zoning Administrator, were first permissible in an M1 light industrial zone. Subsequent to the enactment of the new zoning ordinance, a specific amendment was adopted which listed drive-in businesses including theatres among the permitted uses in the C2 Zone which consequently permitted such uses in the other less restricted commercial zones. The ordinance never has and does not now permit theatres of any type in the C1 limited commercial zone.

"A drive-in theatre by its very nature requires several acres of land, and as a rule, it is very difficult to find a site with sufficient area for such a drive-in theatre all classified in a commercial zone. It is unlikely, therefore, that a drive-in theatre could find a location in a commercial zone adjacent to a well-developed retailing district. At the present time I know of seven drive-in theatres within the City Limits of Los Angeles. Five of these theatres are on acreage sites in the M1 or M2 industrial zones. The sixth theatre is located in the C3 Zone in the 'Gilmore Island area' next to the Farmer's Market, Hollywood Ball Park, Gilmore Stadium and the Pan-Pacific Auditorium. The seventh theatre is located on a C2 Zoned site which was recently created by a zone change for the purpose of the theatre adjacent to one of the Kaiser Community Homes Projects. The Kaiser group own the land and evidently assumed the theatre would not be objectionable to their subdivision project. I have processed two applications for Conditional Use approval for such drive-in theatres. Both were very vigorously opposed by surrounding property owners. One was denied, which denial was affirmed by the Board of Zoning Appeals upon appeal by the applicants, while the other one was tentatively withdrawn and the property has since

been subdivided. I have granted two variances from the height limitations to accommodate the screen structure in zones which contain a 45-foot height limit. There is now pending before me a third request for height variance for such a theatre on M1 Zoned property, which variance is being vigorously opposed by surrounding property owners who do not want the theatre development in their community, even though it is on property permitting the use in question.

"You will note that several of the drive-in theatres occupy acreage sites in the industrial zones. This in itself has created some problem, since the use of the industrial property for this purpose has in some cases eliminated industrially zoned property which we believe will be badly needed in the future to provide a well-balanced land use program for the particular suburban community. There is very little vacant acreage property within the City Limits zoned for industrial purposes, and the use of these vacant acreage industrial sites for drive-in theatres has further depleted the limited available acreage industrial sites.

"Our investigation of drive-in theatres has shown that the main objection is the possible traffic problem and the height of the screen structure which is usually about 85 feet high. There is no particular problem in connection with noise, since the modern drive-in theatre uses individual speakers placed inside of each automobile. We have found that the so-called 'petting' problem, which some moralists claim is an objection to drive-in theatres, is considerably overrated. On the contrary, it has been found that the drive-in theatre is a decided benefit to families with small children who cannot afford or obtain 'baby sitters' and also to families with crippled or partially infirm members who cannot attend the regular theatres.

"Due to the large area required for a drive-in theatre, we do not anticipate any particular problem over such a theatre locating immediately adjacent to a good retail business district in the commercial zones. Although our Planning Commission and Council were of the opinion that drive-in theatres should be automatically permitted in a commercial zone, if they could find a site of sufficient area in that zone, I personally can see some benefit to requiring some processing through a variance or Conditional Use permit before they would be allowed in a commercial zone primarily due to the traffic problem. It is my opinion that although our ordinance now permits them in a commercial zone, most drive-in theatres would still require some processing by variance or Conditional Use, since they will find it difficult to locate a site entirely within a commercial zone and may desire to utilize a site which is partly in a commercial zone and partly in a residential zone, which would then be permitted only if a zone variance was granted to extend the use from the commercial into the residential zone."

An excerpt from another letter, written by Robert S. Russell, Director of Planning, Louisville and Jefferson County Planning and Zoning Commission, to Planning Advisory Service, August 4, 1949, indicates the manner in which the drive-in question was handled in this locality:

"In reply to your inquiry of August 1 relative to drive-in theatres, here is an outline in brief of the status of the six theatres which are now operating in Jefferson County. Of these, five were approved by the Commission after public hearing on each and the other was in operation a short time before the establishment of the County Zoning Regulations. In addition to these, three other requests for drive-in theatres have been denied by the Commission. Two of these were on a narrow winding road to the southeast of the city in an area that is predominately residential in character. I understand that one of these denials has been appealed to the courts but have heard nothing further on it recently. The third denial application occurred on the location of the future Kentucky State Fair Grounds and this action was taken to avoid a conflict and additional expenses in the acquisition of the area for public use. The location of the Fair Site had been added to the Master Plan of the County.

"As to the citizen interest, the two denied locations on Poplar Level Road aroused a storm of protest from the neighboring householders . . . The site of Crittenden Drive had a less amount of opposition because this is largely a farming and industrial area."

Turning to a third community, Madison, Wisconsin, a letter to the Planning Advisory Service from Walter K. Johnson, Plan Engineer, City of Madison Plan Commission, points out that drive-in theatre problems arose in the county, outside the city limits, since the city's zoning regulations do not permit such a location within the city. After the request for a zoning change to permit the location of a drive-in had been turned down, the owners of the large site petitioned for annexation to the city, although they were aware that the city would not allow a drive-in either. In commenting on the zoning change requested, Mr. Johnson said:

"You will note that many residents of the area appeared to oppose the change, as well as members of both the county and town boards, and a representative of the State Highway Commission. The minutes make reference to the drive-in that was permitted out on the east side (again beyond the city limits) and which actually became a serious traffic problem. The salaries paid county patrolmen assigned to handle traffic at the drive-in made the installation an expensive proposition for the public."

Court Decisions

The decisions in drive-in cases made by tribunals of law undoubtedly establish important precedents which may serve to bring about greater uniformity in the regulations governing outdoor theatres. Judicial rulings made in various sections of the country may, therefore, be profitably reviewed to ascertain the legal logic underlying them.

In the case of **E. J. Clark et al. v. Gene Monday et al., Chancery Court, Knox County, Tennessee, Case No. 32896 (May 27, 1948)**, for example, citizens objected to the erection of a drive-in theatre on grounds that it was a nuisance and sought to obtain an injunction against it. The facts of the case, as reported in a letter to the Planning Advisory Service, dated September 23, 1949, from Robert C. Stuart, Jr., Planning Engineer, Knoxville City Planning Commission, were as follows:

"Gene Monday began construction of an outdoor theatre in a light industrial zone when a group of residents living across Newcomb Street in a single-family zone obtained an injunction to 'eternally prohibit' the construction of an outdoor theatre at that site. In his opinion after the hearing, Judge Elkin dismissed the injunction and held that the drive-in theatre was a lawful use. The case was not appealed. The theatre is of the type in which individual speakers are placed in each automobile."

Judge Elkin, in dismissing the injunction, stated:

"Among the rights to be enjoyed by a large class of persons in a crowded city is the privilege of attending places of open air amusement such as the one sought to be condemned in this city by complainants. . . . The proof further shows that the complainants acquired their property . . . knowing that the area, where this enterprise is proposed to be built, was zoned for industrial purposes. A person who acquires land adjacent to an area zoned for industrial purposes, must know that probably at sometime, the owners thereof will desire to use it for industrial, commercial or amusement or other purposes."

Another recent zoning decision involving drive-in theatres is that of the **Board of Adjustment et al. v. Stovall, #14931, Court of Civil Appeals of Texas, Fort Worth, Texas, (218 S. W. (2d) 286), February 11, 1949.** A theatre corporation purchased an 18½ acre tract of land for a drive-in theatre. The zoning ordinance in the city classified the tract, to a depth of 200 feet, as a commercial district. The remainder of the tract was designated as a residential district, in which only one and two-family homes were permitted. The theatre corporation filed an application for a permit to build a drive-in on the land, but the permit was denied by the building commissioner on the ground that the most of the tract was zoned for residences only.

The theatre company appealed to the Board of Adjustment from the action of the building commissioner, and the Board granted the permit to build the theatre. Nearby property owners carried the matter to District Court by writ of certiorari. The District Court held that the Board of Adjustment was without authority to make an order allowing the theatre to be built and set it aside. This case in the Court of Civil Appeals confirmed the findings of the District Court.

The Board of Adjustment was permitted under the zoning ordinance to extend a district where the boundary line divided a lot in single ownership at the time of the passage of the ordinance. The

theatre corporation argued that the division of the tract into commercial and light industrial uses and into residential uses constituted a divided lot. The theatre corporation also contended that literal enforcement of the ordinance would result in unnecessary hardship for it. However, the Court found that the 18½ acre tract, which had not been subdivided, was not a "lot" as contemplated in the ordinance. The court also found that there was no showing that the literal enforcement of the ordinance would result in unnecessary hardship to the applicant; also, the grant of a permit over the remaining 15 acres of the tract could not be viewed as a special exception in the terms of the ordinance, but as "rather, an undertaking by the Board of Adjustment to effect such a change in the zoning regulations as only the governing body of the city could have made by amendment of the zoning ordinance." The court also stated that the grant of the permit was not in harmony with nor in accordance with the general purpose of the ordinance, or its general provisions, but on the contrary, was in direct violation of the letter and the spirit of the ordinance.

In the decision this court stressed that:

> "It is not intended that the board of adjustment shall take over the legislative functions of the governing body of the city. If such ordinance did undertake to confer legislative functions on the board of adjustment, it would constitute an invalid delegation of legislative powers."

And here is still another case decided in Connecticut.

The case of **Middlesex Theatres, Inc., et al. v. Commissioner of State Police et al., 20 A. (2d) 412, Supreme Court of Errors of Connecticut, May 28, 1941,** will be of interest to communities in which drive-in theatres are to be controlled via a building code. The case refers to an open air theatre in which the audience sat on seats in the open air, rather than in their own cars. The court held that the open air theatre did not come within the definition of a building under the provisions of Middletown's building code. In similar fashion, drive-in theatres may possibly be considered as outside the definition of a building. The facts of the case are these: the Commissioner of State Police in Middletown had granted a certificate in 1940 to an open air motion picture theatre with a seating capacity of 988, subject to carefully specified requirements relating to matters of public safety. In 1939, the same Commissioner of Police had granted the theatre a certificate on the basis of a maximum capacity of 300 patrons. He did this following the city's legal adviser's interpretation that the open-air theatre was not a building within the provisions of the city building code and was subject to the limitation of 300 patrons. In the interim period between the Commissioner's two decisions, a mandamus action was brought to the Superior Court, as a result of which the court held that the theatre was not a building within the building code, and therefore, was not subject to its limitations of 300 patrons. The appellants in this case were not parties to the Superior Court action. The plaintiffs wished to hold the Commissioner of Police to his first decision limiting the number of patrons to 300.

In upholding the second decision of the Commissioner of State Police, the Supreme Court of Errors also found that the open air theatre was not a building:

> "This yard is enclosed only by fences. There is no roof. The seats are attached to sleepers set in the ground. In front of them is the screen and to the rear of them is the projection booth. It is difficult to believe that these fences, which are not walls, intended or adapted to support a roof, constitute a building as that word is ordinarily defined . . . we hold that within the meaning of the word as used within the building code, this is not a building. Exhibit J., a photograph of the open air theatre, furnishes decisive confirmation. An examination of the article of the code involved in this case indicates that it was adopted to meet conditions prevailing in the permanent structure of walls, a roof, and floors. For example, there are provisions for the construction of walls, floors, ceilings, heating apparatus, doors, foyers, lobbies, gallery exits, staircases, fire escapes and the like. There are none which pertain to such an establishment as the one in question."

Regulations and Standards

Although drive-in theatres do not present the same problems as those characteristic of indoor ones, they do, just as other places of outdoor assembly, have certain unfortunate aspects which must be dealt with for the benefit of the surrounding community. Aside from the problems of traffic hazards and noise, there exists a genuine need for public control to safeguard the health and safety of the audience and employees. Precautions must, therefore, be taken against such contingencies as parked cars catching fire, film fires, overturning of the screen by wind pressure, blocking of exits by stalled cars, collisions due to poor regulation of traffic and inadequate lighting, disease in restrooms and refreshments stand, etc.

Since many drive-ins are located in areas outside the jurisdiction of a city or town, they must be covered by county or state regulations. It seems profitable, therefore, to examine some typical recommended and adopted regulations on the state and local level. For example, the Committee on Traffic, Sub-Committee on Roadside Control, American Association of State Highway Officials, includes the following recommendations in its preliminary report "Drive-In Theatre Study, 1949":

Location

"Theatres should not be located on major highways but on secondary roads connecting with the major highway.

"Theatres should not be located on major two-lane highways.

"Theatres should be located in districts already partially built up to avoid the creation of new congestion areas.

"Theatres should not be located where view of the entrance is obstructed.

Theatre Screens

"Theatre screens should not be permitted to face the major highway.

"Where screens must face the highway, a fence or trees should be used to obscure its view.

Design of Entrances

"Not more than one entrance should exist for each access road.

"On two-lane roads where left turns are permitted the entrance should not exceed 40 feet in width.

"On three or more lane highways where left turns are prohibited the entrance lane should not exceed 14 feet in width.

"On three or more lane highways where left turns are prohibited the entrance should not be over 19 feet wide.

"Entry turn speeds of 20 miles per hour should be provided for right turn movements.

"Entry turn speeds of 10 miles per hour should be provided for left turn movements.

"Separated entries should be provided for right and left turns where arrival volume is nearly equally divided by direction.

"Not more than one exit should exist for each access highway, and no more than one lane should be permitted for each direction of travel.

"Where left turns are prohibited, the exit should not be more than 14 feet wide.

"Where left turns are permitted, the exit should not be more than 19 feet wide with a small island in the throat.

"Acceleration and deceleration lanes should be used if possible.

"Cuts should not be made in the medial island on multi-lane highways to permit left turn movements.

"Where breaks in the island are provided, they should include provision for special left turn deceleration and acceleration lanes.

Vehicle Storage

"The problems of storage between the ticket gates and the highway are primarily a function of the number of ticket gates.

"One ticket gate should be used up to 300 car capacity theatres. Two ticket gates should be used up to 600 car capacity theatres. Three ticket gates should be used up to 800 car capacity theatres, and four ticket gates should be used up to 1000 car capacity theatres. The above assumes that the theatres operate at capacity.

"Storage facilities need not be greater than 30 to 40 per cent of the theatre capacity.

Traffic Control

"Few theatres now use traffic signals.

"Due to the unusually short peak periods the use of traffic signals is questionable.

"If traffic signals are used, they should be of an actuated type.

"Flashing beacons should be used only where limited sight exists.

"Traffic control is best handled manually.

"Traffic officers could be deputized theatre employees, local police, county sheriff or state police.

"Left turns at entrances and exits should be prohibited on the highway where possible.

"Theatre signs should not be permitted on highway right of way.

"Highway lighting is important even where theatre floodlights seem to be sufficient.

" 'No Parking' signs should be used to prevent stopping or standing of vehicles on the shoulders or pavement.

"Speed signs should not be used unless other factors are involved."

Missouri Drive-In Agreement

The foregoing American Association of State Highway Officials' committee's preliminary report also discusses the expansion and utilization of the permit requirements for access to a state highway as a means of controlling drive-ins, particularly those to be located in an unincorporated territory or other areas where zoning controls may not be in effect. In addition, the report includes sample agreements entered into by state highway departments and theatre corporations, of which the one drawn up by the State of Missouri is typical. Since this Missouri agreement furnishes an excellent example of the way in which the drive-in problem is handled at the state level, it is worthwhile to review its principal points.

The initial two sections of the agreement include a formal oath under which the State grants permission for the owner to construct entrance and exit, or "approach roads," on the highway right of way with such roads to be maintained at the expense of the owner and laid out strictly in accordance with a definite plan to be attached to the agreement. Any alterations or changes in the plan involving the construction of approach roads or drainage facilities must be approved by the State before they may be put into effect. Other provisions of the agreement read as follows:

"The Owner agrees to provide sufficient storage space outside the limits of the highway right of way as required by the State for patrons waiting to enter the theatre in order that the paved surface of the highway, and roadway shoulders, will not be obstructed by said patrons. Such storage space must always provide for at least twenty-five (25%) per cent of the total capacity of the theatre, in cars, but may, at the discretion of the State be designated to provide as much as seventy-five (75%) per cent of the capacity of the theatre in cars.

"The Owner agrees to assist and cooperate with the State in its regulation prohibiting undesirable or illegal turning movements on the highway pavement at the entrance and exit to its property. The Owner further agrees, if requested to do so by the State, to furnish a deputized officer to direct traffic entering and/or leaving the theatre, in order that all such undesirable or illegal traffic movements may be prevented.

"The Owner agrees to limit egress from the theatre to the designated exit, and ingress to the theatre to the designated entrance or entrances. The Owner further agrees that a permanent separation, by means of a fence or permanent barricades will be erected and maintained in such a manner that vehicles seeking exit will of necessity have to use the exit proper, and cannot use the entrance or entrances for exit.

"In addition to all provisions set forth above and called for in the Plan attached hereto, the Owner agrees to cooperate with the State to the fullest extent in controlling traffic at these approach roads, so that a continuing hazard will not be introduced to highway traffic, and said traffic on the highway will have free and unobstructed movement at all times as desired by the State. Should undesirable or dangerous conditions caused by these approach roads present themselves in the future the Owner agrees to take such steps as may be determined by the State in order to correct these conditions.

"The failure by the Owner to abide by the terms of this agreement may be considered as justification for the revocation of the permit incorporated herein."

Additional sections of the agreement prohibit the placing of advertising of any nature on or overhanging the right of way, exempt the State from responsibility for damage to the approach roads in any way caused by its operations on the highway right of way or by the use of the highway by others, require that the cost of revision, relocation, or removal of driveways in the event of further development of highways shall be borne by the owner, and provide that the owner agree to install and operate properly any traffic control devices or signs.

State Building Codes

A number of states have written rules governing drive-in theatres into their building codes in an effort to establish criteria for the construction and operation of such enterprises within their borders. Excerpts from the provisions found in the New York State Standard Building Code for Places of Public Assembly concerning drive-ins may be considered as examples of the approaches being made to the problem on the state level:

Exits

"Exits shall be provided from any building or structure used in connection with a 'drive-in theatre' on the basis of one person to each six square feet of floor space . . . The requirement of . . . a separate system of emergency lighting shall not apply.

Travel to exits

"Exits to a street or road from a 'drive-in theatre' shall be so arranged that lines of incoming and outgoing travel do not cross.

"At no point in the exit travel of any car shall the width of driveway be less than that necessary to accommodate two cars abreast of each other.

"Except when backing from the parked position it shall not be necessary for any car to travel in reverse to reach an exit.

Exit Signs

"The path of exit travel from each row of cars shall be plainly marked by directional signs which shall be clearly visible at night to the drivers.

Disposition of cars

"Each row of cars shall be separated by a distance of at least 20 feet.

"The distance between the first row of cars or seats and the screen must exceed the height of the screen structure by at least 20 feet.

Screen and screen structure

"The screen shall be of incombustible materials. Its supporting structure shall be of incombustible materials, or of heavy timber construction protected by an enclosure of incombustible materials.

"The screen and its supporting structure shall be designed to withstand a wind pressure of at least 25 pounds per square foot.

Where seats are provided for spectators

"Seats and aisles shall comply with the regular requirements.

"Seats shall only be permitted in areas where cars may not be driven.

"Access, and exit passages complying with the requirements of . . . which do not intersect the path of travel of any car, shall be provided.

Extinguishers

"An approved 10-pound carbon dioxide or 2½ gallon foam extinguisher shall be provided and centrally located so as to be readily accessible in case a parked car catches fire. Attendants shall be instructed in its use. Extinguishers shall be checked annually and recharged after use and shall be tagged to indicate when this was done and by whom."

Municipal Ordinances

In many states a major part of the responsibility for the regulation of drive-in construction and operation has been shifted to local municipal or borough bodies of law. New Hampshire, for example, has specifically decreed in its 1949 Laws that:

"Towns shall have the power to make by-laws relating to the regulation and licensing of open-air motion picture theatres within the limits of the town, and may fix reasonable fees for the operation of said theatres, and may enforce the observance of such by-laws by suitable penalties not exceeding twenty-five dollars for each offense, to insure such uses as the town may direct."

Under a similar delegation of regulatory authority to individual communities, the city of Royal Oak, Michigan, adopted an ordinance to license and regulate drive-in theatres on June 13, 1949. Although the city subsequently voted 2 to 1 against permitting drive-ins within the city limits, it seems worthwhile to reproduce the ordinance for the study and possible guidance of other communities contemplating such regulations and for the benefit of present or future drive-in owners in such localities:

"Section 1—License: No person, firm or corporation shall operate a drive-in theatre in the City of Royal Oak without having first obtained a license therefor.

"Section 2—Definition: For the purpose of this ordinance a drive-in theatre is defined to be an open-air moving picture theatre operated in an established permanent structure or building without cover or roof, displaying or

showing moving pictures to the general public.

"Section 3—Applications: Application for license shall be made to the City Clerk and shall give the name and address or names and addresses of the applicant and the person or persons owning an interest in the proposed theatre, and if the applicant be a corporation it shall give the names and addresses of the officers of the corporation. Each application shall set forth the location where it is proposed to operate said theatre. It shall also give the number of cars which said proposed theatre is designed to accommodate.

"Section 4—Fees: The annual fee for operating a drive-in, outdoor or open-air theatre, shall be One Hundred ($100.00) Dollars; provided however, after September 1st the fee for the remainder of the current year shall be Fifty ($50.00) Dollars.

"Section 5—Approval: Applications for a license to operate a drive-in theatre shall be investigated by the City Manager as to the character, reputation and experience of the applicant. If the Manager finds the applicant to be a person of good moral character and a person capable of operating the business in a manner consistent with the public safety and good morals of the City and finds that the proposed buildings and equipment are consistent with the public safety, or otherwise, he shall report his findings to the City Commission who shall approve or disapprove the issuance of said license.

"Section 6—Rules and Regulations: The rules and regulations governing the conduct and operation of theatres and moving picture shows in the City of Royal Oak shall likewise govern the conduct and operation of drive-in theatres and it shall be unlawful for the owner, operator or manager of any drive-in theatre to violate or permit the violation of any of the following rules and regulations, to-wit:

(a) Quiet and good order shall be maintained upon the premises where any drive-in theatre is operated and loitering shall not be permitted in or about the entrance to or exit from such theatre.

(b) No indecent, obscene, immoral or suggestive advertising shall be permitted on the premises of any drive-in theatre, and no picture or other form of advertising shall be permitted which is not true to the theatrical performance or moving picture entertainment so advertised, or which misleads or misinforms the public as to the nature of the picture or entertainment to be exhibited.

(c) No drive-in theatre shall conduct any show, exhibition or entertainment or remain open to the public between the hours of 1:30 o'clock a.m. and 12:00 o'clock noon on Sunday and between the hours of 1:30 o'clock a.m. and 9:00 o'clock a.m. on other days.

(d) Any children admitted to any drive-in theatre shall be accompanied by and in direct personal charge of his or her parent or other responsible person.

(e) It shall be unlawful for a drive-in theatre, or the owner, operator, manager or employee thereof in connection therewith, either directly or indirectly, to maintain, operate or carry on any lottery, game of chance, game of skill, bank night, screeno, luck-o-grams, or any other games of similar nature, or engage in any similar device or plan.

(f) It shall be unlawful for the owner, operator, manager or employee of any drive-in theatre to make a gift or offer a prize or other thing of value in connection with the operation of said drive-in theatre as a means of inducing people to attend or buy tickets for such theatre; and it shall also be unlawful to advertise or represent to the public that any gift, prize or thing of value will be given in connection with attendance or purchase of tickets for said theatre.

(g) The owner, operator and manager or any other person in charge of a drive-in theatre shall be responsible for the enforcement and observation of the rules and regulations contained in this section and no employee of said drive-in theatre shall violate or assist in the violation of any said rules or regulations.

"Section 7—Additional Regulations: All drive-in theatres shall also comply with the following requirements to protect the public safety and welfare and to avoid undue traffic congestions:

(a) Access: There shall be access available to public streets or other public ways from at least two points at all times. Such means of access shall be kept clear at all times to facilitate departure of persons in vehicles and to permit entrance of fire apparatus or ambulances in case of emergency. Drives shall be channelized and limited to not more than three (3) lanes to control traffic. All drives and areas used by vehicles must be satisfactorily paved or treated to avoid creating dust.

(b) Lighting: Exits and aisles and passageways leading to them, shall be kept adequately lighted at all times when open to the public. Artificial light shall be provided whenever natural light is inadequate.

(c) Fire Protection: Except as otherwise provided by law, electrical installations shall conform to the requirements of the National Electrical Code. The electrical system shall be installed, maintained and operated in a safe and workmanlike manner. The electrical system and equipment shall be isolated from the public by proper elevation or guarding, and all electrical fuses and switches shall be enclosed in approved enclosures. Cables on the ground in areas traversed by the public, shall be placed in trenches or protected by approved covers. Fire extinguishing equipment shall be furnished in such amount and in such locations as may be directed by the City Fire Marshal. The electrical installations and fire extinguishing equipment shall be inspected and approved before being opened to the public and shall thereafter be open to inspection at all reasonable hours, to duly designated officials of the City.

(d) Sanitary Facilities: Adequate and proper sanitary facilities, approved by the Chief Inspector and Department of Health, shall be provided.

(e) Patrol: At all times when a drive-in theatre is open to the public there shall be one or more qualified attendants on duty at all times, who shall patrol the exits, entrances and parking spaces to see that order is maintained, disorderly or immoral conduct prevented, the entrances and exits kept free from congestion, and that the rules and regulations appertaining to drive-in theatres are observed.

(f) Appearance: The operator of any drive-in theatre shall provide a wall of adequate height to screen the patrons and cars in attendance at said theatre from the view of the surrounding property. Such fence shall be of design and structure approved by the Chief Inspector. The perimeter of said fence shall be landscaped with suitable plants and shrubbery to preserve as far as possible, harmony with the appearance of the surrounding property.

(g) Noise: Individual loud speakers for each car shall be provided and no central loud speaker shall be permitted.

EDITOR'S NOTE

The American Society of Planning Officials was established in 1934 as a non-profit corporation to promote efficiency of public administration in land and community planning. It serves as a clearing house for information on planning and related subjects, and makes available information to its members and the interested public through correspondence, public addresses, the publication of a Monthly News Letter, special reports and bibliographies, and compilations of data and regulations.

The proceedings of an annual national planning conference are published in permanent form. Assistance is given to public officials, students, and lay groups in the field. Visistors, many of whom come from foreign countries, are welcomed and are helped with their problems or projects. Walter H. Blucher, Executive Director of the American Society of Planning Officials, whose membership is over 2,000, has served on many committees, foundations, and organizations devoted to the furtherance of community planning.

Special technical services have been inaugurated for subscribers. One, the Zoning Digest, summarizes and highlights the most recent court decisions on zoning. Another, the Planning Advisory Service, prepares special research reports on planning subjects and undertakes individualized research for its members.

(h) **Commercial Activities:** Any sale of soft drinks, confections or other articles of merchandise, shall be governed by the laws and ordinances governing such business and shall require the same license as if such sales were conducted elsewhere.

"Section 8—**Zoning:** Drive-in theatres shall be conducted only in Industrial B Districts.

"Section 9—**Penalty:** Anyone violating any of the provisions of this ordinance shall, upon conviction thereof be fined not more than Three Hundred ($300.00) Dollars or imprisoned not more than thirty days in the City Prison or County Jail, or both such fine and imprisonment in the discretion of the court.

"Section 10—**Effect:** This ordinance shall take effect twenty (20) days after its passage."

The city of Cleveland, Ohio, also adopted an ordinance on June 27, 1949, regulating drive-in theatres. The following excerpts from that ordinance shed light on the approach which another municipality has taken toward the drive-in control problem:

"Section 2848-1. **License Required:** It shall be unlawful for any person, firm or corporation to open, operate or maintain, or cause to be opened, operated or maintained, any drive-in theatre without first obtaining a license so to do as hereinafter provided.

"For the purposes of this ordinance a drive-in theatre is defined as any enclosed premises in which motion pictures are projected upon a screen which are viewed by patrons seated in automobiles parked within such enclosure and for which privilege an admission charge is made.

"Section 2848-3. **Annual Fee:** Any person, firm, corporation or association to which a license is granted shall pay an annual fee therefor as follows:

500 or less cars	$ 500.00
More than 500 cars but less than 1000 cars	1500.00
Over 1000 cars	2500.00

All licenses granted under the provisions of this subdivision shall expire on the first day of May. The license issued in accordance with the provisions of this subdivision shall be displayed in a conspicuous place in the drive-in theatre for which it is issued. No transfer of any license shall be permitted.

"Section 2848-4. **Regulations:** No drive-in theatre shall be maintained or operated:

(a) In violation of any provision of the zoning code;

(b) So as to constitute a fire or traffic hazard;

(c) Unless adequate provision in the judgment of the Commissioner of Health is made for sanitary needs of patrons;

(d) Unless the parking and driving areas are hard surfaced or so treated as to minimize the creation of dust;

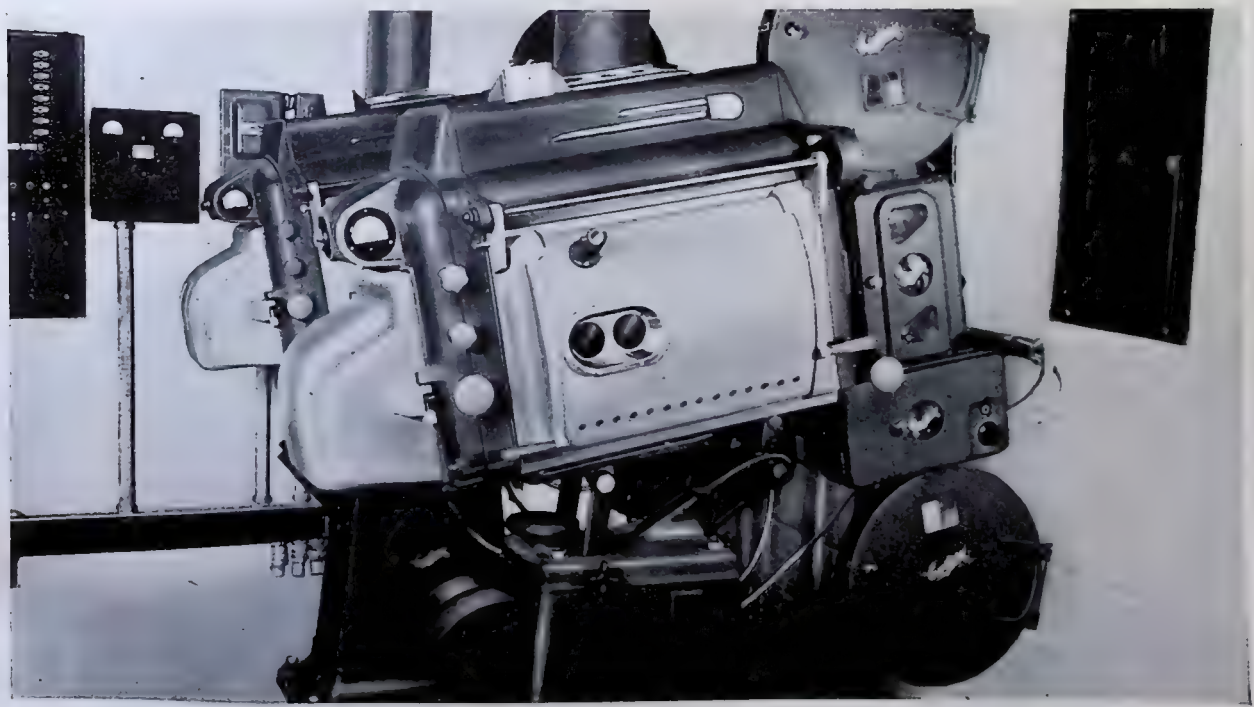
(e) Except in a clean and orderly manner;

(f) After 12:00 o'clock midnight;

(g) In or upon which immoral acts are permitted."

As a final example of the ways in which municipalities are resolving the question of drive-in regulations, the city of Winston-Salem, North Carolina, has proposed to permit drive-in theatres under "special uses and structures permitted in rural districts." The proposed wording is as follows:

"A drive-in theatre, including facilities for serving food and beverages to patrons in their vehicles, provided (a) that no part of such theatre shall be located closer to the boundary of any Residence District than 1000' or closer to any highway or adjoining property line than 50'; (b) that the area accessible to patrons' vehicles be treated with suitable material to prevent dust; (c) that parking space be provided for patrons awaiting admission equal to not less than 30% of the vehicular capacity of the theatre; (d) that the vehicular circulation be so designed and constructed as to permit only one-way-traffic within the boundaries of the tract on which the theatre is to be located; (e) that ingress and egress from the highway be so designed and constructed as to provide for safe traffic movement; (f) that the moving picture projection booth be constructed in full compliance with the City of Winston-Salem Building Code and applicable State regulations."



PROJECTION BOOTH REGULATIONS normally pose no problem of compliance in a drive-in theatre. The location of the projection building in an island with one or more exit doors; and the unlimited space that usually results in generous dimensions; are coupled with preponderantly new equipment of the good quality necessary to light the huge picture screens at extreme projection distances. Here illustrated is the orderly booth of the 800-car Starlite, Minneapolis, Minn., owned by Minneapolis Entertainment Enterprises of which Harold D. Field is president. A 60 foot screen and 230 foot throw are satisfactorily served by these Century projectors and sound heads and the new "Super-High" Ashcraft water-cooled lamps burning the new 10 mm. National carbons. Fitted with 16 inch reflectors these lamps burning at 90 to 100 amperes have put on some amazing demonstrations of light production at low carbon and current consumption rates. Water cooling is a means toward safely using high amperages without heat filters.

1949-50 Structure and Practice Survey

Standard Requirements, Facilities, and Methods for Modern Drive-Ins Are Initially Established

BRIEF: *Whenever a new commercial enterprise expands to the point where it seems assured of a permanent place in industry, it is desirable to establish certain product standards . . . in order that it may operate most efficiently with the least waste of time, money and manpower . . . These standards are, of course, determined only after lengthy experimentation . . . The automobile industry, for example, has expended long hours of research and millions of dollars . . . in establishing body lines which are least resistant to wind pressure . . . The results of its efforts are the long, sleek lines which characterize the bodies of modern cars.*

The drive-in theatre business . . . in less than a score of years . . . has passed far beyond its embryonic beginnings and has entrenched itself firmly as a popular entertainment form . . . From its development . . . through the sound process of trial and error . . . certain requisites and operational techniques have emerged to be considered and followed by the industry.

Up to the present time, however, this knowledge has remained rather obscure . . . with little effort made to disseminate and standardize requirements and procedures found to be most worthwhile . . . In recognition of this sorry lack of general information as to the best rules for operating a drive-in, the editor of THEATRE CATALOG . . . through direct contact with the operators of top-notch outdoor theatres . . . have sought to unearth reliable executive opinion . . . on such subjects as confection stand location, playground and play area facilities, losses through theft and accident, picture and child admission policies, etc.

The results of the survey . . . some of which may surprise many readers . . . appear to point the way toward the establishment of operational criteria . . . which may profitably be followed by both present and future operators . . . In any event, the time for a pooling of knowledge . . . and the establishments of standards therefrom . . . has arrived . . . We trust the presentation of the data below will hasten the day when outdoor theatremen will have a complete guide by which to govern themselves.

Introduction

The announced intention of THEATRE CATALOG is to survey annually the physical properties, functional use, and management techniques which are in vogue in the nation's theatres, for the benefit which such knowledge has for all types of theatre planners — whether owner, architect, supply dealer, or manufacturer. In pursuit of this aim, the editors, late in 1949, contacted many of the more experienced operators of drive-in theatres and asked them certain pertinent questions, the answers to which the normal industryite could only guess.

For the purpose of this survey, it was concluded that the growth of drive-in theatres, from a bare handful at the end of World War II to 768 throughout the nation at the end of 1948 and still further growth to the imposing listed by name elsewhere in this edition, had rapidly passed through the nickelodeon age that marked nearly a decade in the development of the modern roofed theatre. Thus, the most useful conclusions could be drawn only from an analysis of the larger, more modern, and better designed recent theatres, the ownership and management of which had large stakes in the future of drive-in theatres. In any broadcast search for facts directed to all drive-in owners, there would be certain to appear many facts and opinions reflecting the equipment and experiences of the small "cow pasture" theatres, where both the cost and the potential return are relatively minor in comparison to this rapidly growing major segment of the motion picture theatre industry. As the purpose was to develop material on which design improvement could be built, and future development forecast, this survey was carefully hand-picked, in order to reflect only the better conditions and modern growth which would provide constructive guides.

The answers which were received, and reduced to survey spreads for tally and conclusion, represent the executive thinking and conclusions of a "Blue Ribbon Panel" of the ownership and management of approximately 10% of the better drive-in theatres of the nation. The findings can serve as important yardsticks by which the owners of other similar enterprises can judge the efficiency of operation and physical aspects of their own. Such findings can also chart the future design and equipment necessities of those who plan a drive-in theatre. They will also serve as creditable objectives for the future development of the drive-in theatre industry.

In selecting the questions which were considered to be most pertinent, considerable thought and attention was given to the choosing of those which would be most valuable for current use. Many of them cross-checked one another so that the most firm and creditable summary would be produced. They dealt with matters of location, equipment, construction times, operating personnel, losses from theft, losses from accident, method and policy. The results are hereby categorically listed for their usefulness to the industry at large.

Locating the Confection Stand

The first question dealt with: "What Has Been Found to be the Best Location for the Confection Stand and What Has Been Found to be its Best Auxiliary Equipment or Personnel for Serving the Ramp Areas?" The replies were varied, but some pretty definite conclusions resulted. Many executives named an area of several ramps where the confection stand location would be adequate to the best service and profit. Rather than attempt to strike averages, it was deemed most advisable to tally all suggested locations in accordance with the number of times which they were recommended. The results will be found under Table No. 1.

As will be noted, Ramp No. 4 is the most popular choice with 37% of the references, while Ramp No. 5 follows with 24.8% and Ramp No. 6 with 17% to combine between them nearly 80% of this experienced opinion.

Of contrasting importance to the above was a portion of this question which asked whether the confection stand should be connected to or separated from the projection booth. The answers reflect that 59.4% believed connection to the booth not only results in considerable structural savings, but does not materially affect the operational standards of either building. 40.6%, however, feel that the forced location of the projection booth in the lower numbered ramps re-

Table I

Best Location of the Confection Stand?

a) Situation in Ramp No. 4	37.0%
b) Situation in Ramp No. 5	24.8%
c) Situation in Ramp No. 6	17.0%
d) Situation in Ramp No. 7	8.0%
e) Situation in Ramp No. 8	7.8%
f) Situation in Ramp No. 9	4.4%
* * *	
g) Connected to the Projection Booth	59.4%
h) Separate and behind the Projection Booth	40.6%

Table II

Best Equipment and/or Personnel to Serve Ramps?

a) No Service or Solicitation in Ramps	69.1%
b) Personnel Equipped with Carts, etc.	* 30.9%

** Of this total 66.6% used carts; 19% used motor driven carriers; and 14.3% used signal systems to attract ramp service.*

moves the confection stand too far from the mass of patronage in the wider, higher numbered ramps, so that the necessary long walk by confection messengers or patrons is inefficient and affects adversely the important confection gross. These latter feel, therefore, that the confection stand should be separated and more centrally located in the ramp area.

Confection Ramp Service

As a third portion of this same question, the executive answers dealing with what service in both personnel and equipment should extend confection vending to the ramp areas will prove to be a surprise to many. As delineated in Table No. 2, it will be noted that 69.1% feel there is much to be said against any effort at ramp vending whatsoever. Their rensons are many and varied and constitute a major part of the volunteered extra knowledge written into the replies. A cross-section of opinion is as follows:

"Such vending has been found to be not too profitable because of the labor expense involved for the resultant gross."

"We find that a good popcorn machine and a well-attended popcorn stand at the ticket box and a large, well-equipped confection building in the interior will outsell our ramp efforts."

"We believe that first consideration is for show enjoyment; and patrons cannot enjoy the show with car-hops annoying them to buy merchandise."

"We think it disturbs. A cafeteria system speeds sales and sells more. Patrons like it better."

"Hawking among the cars has been found to be objectionable; however, when equipment is provided with signal lights, cart vending, on signal only, is profitable and unobjectionable."

"Car service may be annoying to some patrons, and if not started at the time of the initial operation, it is not needed to obtain maximum sales."

"Forget the ramp areas and arrange a popcorn stand at the ticket booth. We now get 75% of our former ramp sales from this point and with only one attendant."

Many other similar references prove the deep conviction of this majority opinion. However, nearly 31% believe from their experience that carts, signal lights, and even motor-driven equipped conveyances, are important to not only the service of the patrons, but to the confection profit. Like so many other important facets of modern theatre operation, this would seem to be a point that will require very careful study and experimentation by each theatre owner, based on his knowledge of his patronage and on the facilities offered in neighboring competing theatres.

Food and Drink Handling Equipment

A second important question dealt with: "What Should Be the Minimum Equipment for Food and Drink Preparation and Handling Installed in the Average Confection Stand?" The tabulated results will be found in Table No. 3 and should serve as a creditable guide in new planning. Of greatest importance would seem to be popcorn machines, steam tables, grilles or hot plates, drink dispensers, and ice cream cabinets, with many of the replies indicating that a good number of the larger theatres require two and more of each. Additional popcorn warmers to give spread to the dispensing of this popular delicacy are also important; just as coffee urns, french fryers and bun warmers come in for their own share of attention.

Except for serving the small-profit needs of the cigarette smoker, automatic vending equipment does not seem popular, probably because of its relative expense as well as its lack of dispensing speed. While fountain dispensers dominate the drink handling equipment, and it is believed that 3.6 faucets are the average need, it has been noted in the replies that bottled beverages are still found to be a quick and profitable dispensing method in nearly 20% of the theatres analyzed.

Also, of importance to the new builder, is the opinion of nearly 25% that a walk-in cooler or refrigerator room is a need that becomes very acute in the proper storage and handling of large quantities of beverages, foods, and confections.

Average Construction Times

In any large grossing and large profit margin business such as the drive-in theatre, the time consumed in construction, particularly if this time is any part of the normal 30-week season enjoyed by the majority of the nation's theatres, is of vital importance to the first year's profit. As a result, the next question to be asked was: "What Has Been Your Average Construction Time Between Ground Breaking and Opening?"

For the average size theatre of 691 cars, in the "package" analyzed from these executive answers, the average construction time, by actual report of the owners, was 110 days per theatre or 15.9 days per hundred cars. True, as explained earlier in this survey, the theatres represented by this "package" are larger, newer, and possibly more expensively built and equipped than the national average, so that it is admittedly quite possible to build a smaller, cheaper, or less ornate theatre in a considerably shorter space of time. At least one of the "turn-key" contractors guarantees construction in as few as 21 days.

It is also admitted that as the key towns in any territory become saturated, the future development of drive-in theatres will be toward the service of smaller communities where the theatre need not be as large, as ornately designed, or as well equipped. Offsetting this trend to some extent will be the obviously developing tendency to make the drive-in theatre a play center and amusement park, rather than a theatre alone. However, for top quality current construction using skilled union mechanics in the various fields involved, nearly 16 days per hundred cars is the current experience and can serve as a time budget, against which every day saved will reflect a management profit.

Table III

Minimum Equipment for the Confection Stand?

a) For Cooking or Heating:	
Popcorn Machines	75.4%
Steam Tables	68.4%
Grilles and Hot Plates	61.3%
Coffee Urns	19.3%
Bun Warmers	17.6%
French Fryers	14.0%
b) For Automatic Vending:	
None	70.0%
Cigarettes	30.0%
Candy	4.1%
Beverage	2.5%
c) For Drink Dispensing:	
Fountain Dispensers*	80.3%
Bottles	10.0%
Both Bottles and Fountain	9.7%
**Average number of faucets needed per Fountain was*	3.6
d) Other needs:	
Ice Cream Cabinets or Machines	54.4%
Walk-in Cooler or Refrigerator Rooms	24.5%
Popcorn Warmers to Support Machines	15.3%

Needed Ramp Personnel

Again relating to profit from the opening day and throughout any successful season is the number of ramp attendants necessary to move the maximum number of entering cars off the highways, direct them through the boxoffices into their ramp locations, and out again at the show break. Too few personnel can serve to jam the very arteries and veins through which the boxoffice blood flows, while too many can siphon off profits through inordinate payrolls. The same problem is present in the confection stand personnel, whether they wait for patron demand to come to them or go out to solicit trade in the ramp areas. Efficient balance with neither too few or too many is the objective, and the next question was designed to probe from this better class executive experience some yardstick by which such personnel requirements could be gauged.

The actual question: **"What Ramp Personnel Are Needed?"** was split into three parts, and the first dealt with what number of ramp attendants or car hops were necessary for efficient traffic movements per-hundred-cars. In reply, the executive opinion hovered constantly around the range of a single attendant per hundred, with the final average decided on 1.2 attendants per-hundred-cars. This would indicate that a 500-car theatre should operate efficiently with six driveway and ramp attendants, even at a peak traffic flow, while a 1000-car theatre would need twelve attendants, intermediate sizes would be adequately staffed in this same ratio.

The second part of the question dealt with the number of confection stand attendants necessary per-hundred-cars, and again the executive opinion held very tightly to a narrow margin around the single attendant, with the final average being .99, or, for all intents and purposes, one attendant per-hundred-cars. This seemed to vary little, whether the operating policy included the staffing of the stand alone or the actual sale in the ramp areas of all types of food and beverages. The reason expressed for this was that ramp salesmen were brought in to serve the peak load at the show break, and only worked the ramps during the flat period, so that the method of sale had little to do with the number of personnel required.

As a third portion of this same question, it was asked whether the two groups of ramp attendants and confection salesmen could be combined efficiently to help one another at any time, and a majority of 59.1% stated that in their opinion this was possible. Even the contrasting 40.9% agreed that there were times when this was possible, but pointed out that at the show break, when the greatest demand was on the serving of confections, there was also considerable traffic movement both in and out of the ramp areas, so that maximum staffs of each class of personnel would be occupied with their own duties.

Playground and Play Area Facilities

Probably the most important trend noticeable in larger theatre construction during 1949 has been the extra features which have been added to attract and amuse the junior and baby element, a group which has come to form one of the most important reasons-for-being of the drive-in theatre. Few indeed are the larger theatres that do not cater to the tastes of these youngsters, from toddlers of two and three years old to the lower teen agers, with playground equipment, ponies, dance floors, etc. As a result, the next question asked: **"Do You Have Playground Equipment, and If So, What Equipment Is Installed and Successfully Operating?"** The executive answers indicated that 85% of the "package" analyzed did contain playground features of some nature.

Of this 85% that had playgrounds, a wide assortment of equipment was indicated as tabulated in Table No. 6. While slides and swings were by far the most common, requiring a minimum of supervision, there were enough other types of equipment mentioned, and sufficient written-in references covering the intention to install mechanical trains, miniature zoos, and similar exciting juvenile diversions, that it is safe to forecast a continued expansion in this direction. It was also noticeable that many theatres indicated multiples of two, four, and even six of a particular device as being the necessary minimum to satisfy the peak load of children's demands.

Table IV

Average Construction Time Necessary to Build?

a) Average size of theatre analyzed	691 cars
b) Average number of days between ground breaking and opening	110 days
c) Average number of days needed per 100 cars	15.9 days

Table V

Personnel Needed for Ramp Traffic and Confection Sales?

a) Car Hops or Ramp and Traffic Attendants per 100 cars	1.2 employees
b) Confection Stand Management and Sales Attendants per 100 cars	0.9 employees
c) Executives who believe the two groups can be combined	59.1%
d) Executives who believe the two groups can never be combined	40.9%

Losses Through Theft and Accident

Because of its exposed and often unfenced nature, the drive-in theatre would seem to be the prey to petty pilferage of speakers and other equipment, just as the movement of a great number of automobiles in semi-darkened areas would seem to carry with it a high rate of accidental damage to speaker posts, etc. Through researching the experience of large scale operations, where these two losses would seem logically to be more common than in the more intimate small theatre, the next question asked: **"What Has Been Your Average Speaker Loss From Theft and From Accident?"** From Table No. 7 can be noted the comparative smallness of such loss in relation to the known large annual traffic. It is particularly interesting to note that, drawing on their actual experience for the entire 1949 season, 10.7% reported no losses at all from theft, and 30% reported no losses at all from accident. And even those reporting losses for either cause

Table VI

What Playground Areas or Playground Facilities?

a) Have completely equipped playgrounds	85%
b) Do not have playgrounds	15%

c) Of those having playgrounds the following equipment is most popular:

Slides	92.1%	See Saws	23.5%
Swings	88.2%	Small Rides	17.6%
Pony Rides	37.2%	Shuffle Board	15.7%
Merry-go-rounds	37.0%	Dance Floors	7.8%
Sand Boxes	37.0%	Climbers	3.8%
Horseshoes	27.5%		

Table VII

Losses Through Theft and Accident?

a) No Loss through Theft	10.7%
b) No Loss through Accident	30.0%
c) 1.96 Speakers per 100 cars, per season, through Theft	65.9%
d) 1.60 Speakers per 100 cars, per season, through Accident	46.6%
e) 6.36 Speakers per 100 cars, per season, through Theft or Accident	23.4%

* * *

RECAP 20.35% of all theatres should experience NO loss for either reason.
79.65% of all theatres should experience SOME loss for either reason.
Average loss of speakers per-100-cars-per-season should be 3.83 speakers.

indicated a national average of only 3.83 speakers per-hundred-cars for an entire year. These figures may not reflect any great potential replacement market from these particular reasons for the supply dealers of the nation, but they do point up the fact that the majority of drive-in theatre patrons are family units with a much greater tendency away from vandalism than is the norm with roofed theatre patrons. It also reflects on the skill of the ramp personnel in directing motor-driven traffic with a minimum of damage to either the cars or the theatre's own equipment.

Surfacing of Ramps and Driveways

It has been noted elsewhere that one of the expensive parts of new construction and maintenance in the drive-in theatre is the surfacing of the use areas. Many of the original theatres used only thin layers of crushed stone and gravel with little or no binding agent, and many of the more experienced owners still recommend this type of dressing until the first year of use and weathering has disclosed all soft spots, low areas, high areas, or other results of the necessary dirt-moving process. It has been pointed out that proper preparation in the form of tamping and rolling will eliminate many of these headaches, so that it is often safe to oil or black-top ramps and driveways at the time of the original construction.

In response to the question: "Are Ramps and Driveways Black-Topped or Otherwise Dressed?" the executive answers of the "package" analyzed indicated the totals found in Table No. 8. While the replies told of varying uses of asphalt and oil applications, over all sorts of bases, which were primarily dependent on the available materials in a particular locale, it is significant to note that 62.5% had black-topped driveways, while 56.2% had black-topped ramps. This very black-topping can be construed as reflecting the confidence which ownership has in the life and future of this facet of theatre business. And many of those who, basing their opinions on the "cow pasture" operations, expect to see drive-in theatres evaporate in public favor, in a manner similar to the "tom-thumb" golf course of a past era, can take pause from the immenseness of the investment in just one feature of permanency which these totals indicate.

While the reader is again reminded that the theatres here analyzed are not to be regarded as the national average, but represent a "Blue Ribbon Panel" of the better and more deluxe construction; it is a known fact that the average sized drive-in theatre requires approximately 15 acres of driveway and interior ramps; thus, if the tendency continues to construct drive-in theatres of the deluxe type, the industry investment in surfacing will be a very important one indeed.

Table VIII

The Surfacing of Ramps and Driveways?

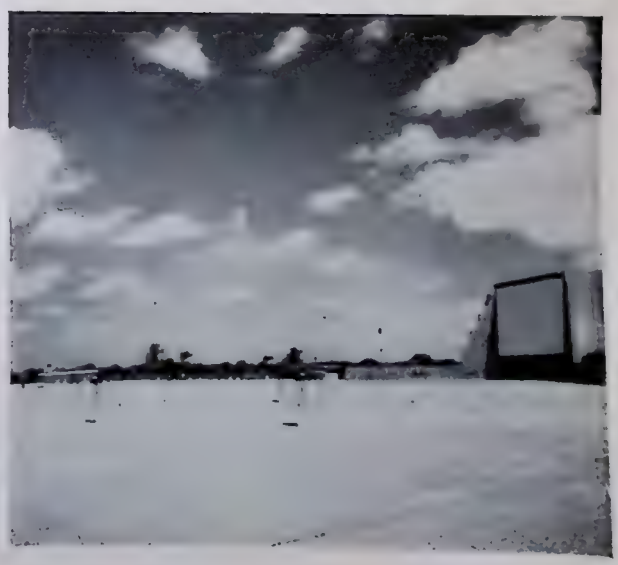
a) Those Having "Blacktopped" Driveways	62.5%
b) Those Not Having "Blacktopped" Driveways	37.5%
* * *	
c) Those Having "Blacktopped" Ramps	56.2%
d) Those Not Having "Blacktopped" Ramps	43.8%

Out of Season Maintenance

Another subject, that has been the occasion of a wide divergence of opinion, deals with whether the seven to eight months seasonal theatre, which constitutes the vast majority in the nation, must dismantle and store its ramp equipment during the inclement weather of the winter months; or whether it is safe to adequately protect it from the elements, and leave it in place until spring. To get experienced opinion on this point, the next question asked was: "Do You Remove Speakers and Junction Boxes During the Winter?" The tabulated re-

THE BUCKHORN, MISSION, TEXAS, is another outstanding example of imagination, care, and investment. Its driveways are wide and curbed in white painted concrete; its lawns are fenced and tidy; its attraction sign and box-office island are modern; and the screen tower is sturdily constructed. Inside, the ramps are black-topped with a gravel dressing. Speakers, projection and sound, and other booth equipment are Simplex.





plies under Table No. 9 indicate that a large majority remove and store all or part of such equipment, while 26.3% protect and cover the entire unit and leave it right on the ramp speaker posts.

From the replies it can be noted that many of the complete removals are made with a view toward an annual checking and servicing of the component parts. It is felt that the rains, fogs, summer sun, bumping, and handling of a busy season would threaten to shorten the life of even the best equipment, so that the removal is not for storage alone, but to provide time for an off-season bench inspection and the touching up and repair of any interior damage.

Picture and Child Admission Policy

To finish off this 1949 survey, a final question, that might be of help to both the contemporary owner and the newcomer, was dual in nature and asked: **"Do You Observe a Single or Double Feature Policy and Do You Make Any Charge Whatsoever For Children?"** The results found under Table No. 10 show that only a very small 23% observe a single feature policy, while the balance mix their singles and doubles or play a straight double feature policy, in accordance with the strength of their shows, or the policies of the theatres surrounding them.

Of probably some surprise to drive-in owners, in whole sections of the nation where it is uniform policy to allow free admission to children under 12 years old, is the report that 32% of these larger and better equipped theatres do charge for children between the ages of 6 and 12 years. The average charge is not great, but does approximate 9 cents, and when the number of children per car is considered, this admission can amount to a tidy sum at the end of any one season.

* * *

EDITOR'S NOTE: In a later annual volume, a national survey of all drive-in theatres, broken into all size and operational policies, will be undertaken. It should prove of value.

Table IX

Close-of-Season Maintenance of Ramp Equipment?

a) Those Who Remove Speakers and Junction Boxes	58.0%
b) Those Who Remove Speakers Only	15.7%
c) Those Who Protect and Leave Speakers and Junction Boxes	26.3%

However, once again, policies which have already been established, and the changing of which might cause resentment, or diversion of patronage to competing enterprises, must influence any owner's judgment with regard to children's admissions.

Conclusion

As the continued expansion of drive-in theatres and drive-in theatre facilities spread the service areas of these types of theatres beyond the present metropolitan districts and into the more or less "neighborhoods" or "suburban areas," the resultant drive-in theatres themselves may become smaller and slightly less ornately neon-signed and equipped; but they will still be considerably superior to the original "cow pasture" ventures, which gave this field its first impetus. The owners of many of these original ventures have already shown that they are smart enough to keep pace with, or avoid, competition by continuing to improve, rebuild, and re-equip. Others have fallen prey to the first modern, well-equipped drive-in theatre to enter their drawing area. But as the field develops, and as more and more family patrons come to know and use the facilities of drive-in theatres, the very force of their demands will make drive-in theatre construction, and operating methods, conform more closely to the standards of the "Blue Ribbon Panel" here analyzed than to the nation's current average.

Table X

Picture Policy and Children's Admission?

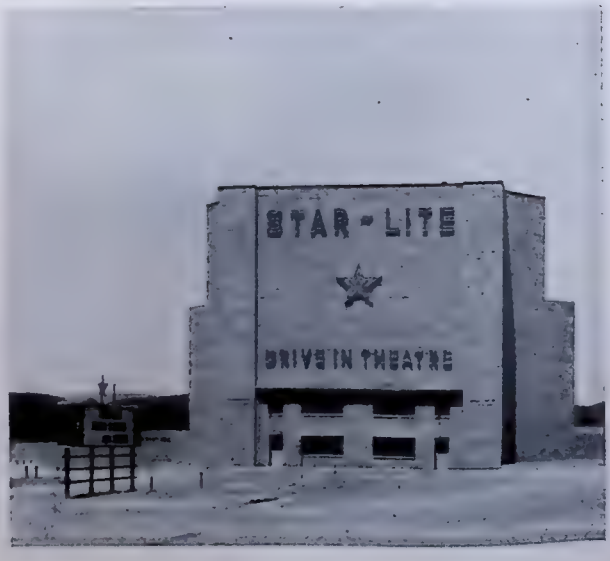
a) Single Feature Policy ONLY	23.4%
b) Mixed Double and Single Feature Policy	50.0%
c) Double Feature Policy ONLY	26.6%

* * *

d) An Admission Charge* For Children over 6 years	32.8%
Average Admission Charge	9c

THE STARLITE, NEAR WILLIAMSPORT, PENNA. Owned by Chester Darrin and Roy Brehm, and equipped by Vincent Tate with 800 Motiograph speakers and Motiograph projection and sound, the picture size is 44x60 feet. 40,000 concrete blocks were required to build the screen tower which contains two apartments. The projection building houses the offices and observation room together with the well and water facilities.





Drive-In Theatres of the 1950 Season

A Copyrighted and Detailed Analysis of Their Locations, Capacities, Ownerships and Policies

BRIEF: To satisfy a crying need for definite, verified knowledge about this newest and most rapidly growing facet of the theatre industry . . . THEATRE CATALOG at great cost in man-hours and dollars . . . launched a national survey to develop a relatively accurate list of drive-in theatres that are either now operating or are definitely planned to operate during the 1950 season. . . . The resultant 1753 drive-in theatres . . . tabulated by film distribution territories and by states . . . are here presented as a motion picture industry service. . . . Use of this service for mailing list purposes, without the permission of the publishers, is postively restricted.

Due to the several reasons of (1) rapidity of growth, (2) rural highway rather than town or city locations, and (3) wide interest and construction during the 1949-50 motion picture season by "non-industry" executives, there has been a wider range of misinformation, conjecture, and estimate, about the current number and average size of the drive-in theatres of the U. S. A. than have ever previously related to industry statistics. Each specializing manufacturer of drive-in theatre equipment, and each theatre supply dealer, knew that they had made and installed a lot of equipment; but, preoccupied with the building boom, and with scrambling for their share of the resultant business, few stopped to tally even their own orders, let alone estimate with any accuracy the orders of their competitors.

Then again, in-car speakers and their relating junction boxes are relatively simple mechanisms to design and fabricate so that all of the installations were not restricted to the manufacture of the four or five "line" companies, as is the case with projection and sound. Numerous smaller manufacturers of in-car speakers have sprung up throughout the country, developing some new design ideas and offering some very acceptable speaker combinations that have naturally received their smaller share of the total purchases. This unusual competition further confused the possibility of compiling creditable statistics, or any sizable amount of operational data, from equipment manufacturers or dealer stores.

The film distributors had even less data. During their first year of operation in non-competitive locations, many drive-in theatres required little or no major product, and were able to confine their film purchases to the smaller state-right and reissue exchanges. Most times they found enough acceptable old product on the shelves of one or two of such fringe distributors, so that the other exchanges in a particular territory didn't even know of the existence of many theatres. Competition, and the lessening novelty of the drive-in theatre as an entertainment source, eventually drove many such operators into the major and minor national distributors to make purchases; but, even then, their patronage was confined to only two or three, so that the others might be completely in the dark as to certain particular potential customers.

Realizing the need that existed for some creditable list, and for operational data, on this rapidly growing important segment of its industry, THEATRE CATALOG investigated both of the important sources (manufacturer-dealer and film distributor) before concluding that it would be relatively impossible to combine their meager knowledge with any complete and accurate results.

The THEATRE CATALOG Census

To obtain this knowledge, several months, a sizeable cash outlay, and thousands of man-hours were devoted to a fine tooth combing of every nook and cranny of the nation and to a cross-checking and compilation of the gathered data.

Backbone of this national census was the complete, nation-wide news gathering staff of its sister publication EXHIBITOR, that weekly serves its nearly 11,000 subscribers with a thorough local news coverage of each of the industry's 31 distributional territories.

DRIVE-IN THEATRES and Their CAR CAPACITIES BY FILM DISTRIBUTION TERRITORIES

Film Distribution Territory:	*Operating—1950 Season*			*Closed—1950 Season*		
	No. of Theatres	*Total Cars*	*Ave. Cars*	*No. of Theatres*	*Total Cars*	*Ave. Cars*
Albany, N. Y.	31(1*)	10,888	351	0	0	0
Atlanta, Ga.	126(1*)	51,144	405	1	150	150
Boston, Mass.	70(3*)	36,165	517	3	325	108
Buffalo, N. Y.	28(1*)	16,540	570	0	0	0
Charlotte, N. C.	179	41,683	233	8	1325	166
Chicago, Ill.	38(5*)	29,535	777	1	550	550
Cincinnati, O.	99(2*)	41,918	423	4	800	200
Cleveland, O.	67	25,965	388	0	0	0
Dallas, Tex.	203(22*)	77,331	381	1	300	300
Denver, Colo.	39	16,431	421	0	0	0
Des Moines, Ia.	28	12,224	437	0	0	0
Detroit, Mich.	42	23,571	561	1	120	120
Indianapolis, Ind.	66(3*)	29,098	441	1	250	250
Kansas City, Mo.	51	23,510	461	0	0	0
Los Angeles, Cal.	58(5*)	41,394	714	2(2*)	434	217
Memphis, Tenn.	35	15,615	446	2	493	247
Milwaukee, Wis.	20	11,754	588	0	0	0
Minneapolis, Minn.	34	14,838	436	0	0	0
New Haven, Conn.	9	4,759	529	0	0	0
New Orleans, La.	61(3*)	24,796	407	0	0	0
New York, N. Y.	23(2*)	14,622	636	0	0	0
Oklahoma City, Okla.	38	17,869	470	0	0	0
Omaha, Neb.	19(1*)	8,524	449	0	0	0
Philadelphia, Pa.	61(2*)	38,631	633	1(1*)	217	217
Pittsburgh, Pa.	72(5*)	31,189	433	0	0	0
Portland, Ore.	12(1*)	6,035	503	0	0	0
St. Louis, Mo.	73(1*)	42,619	584	0	0	0
Salt Lake City, Utah	40(2*)	16,451	411	1	250	250
San Francisco, Cal.	48(3*)	27,537	574	0	0	0
Seattle, Wash.	18(1*)	8,920	490	1	650	650
Washington, D. C.	65(5*)	23,089	355	0	0	0
Totals	1753(69*)	784,645	447	27(3*)	5864	217

(*) Whenever car capacities could not be ascertained, the theatres themselves were included in the totals and the numbers unverified were signalled in the accompanying parenthesis. For each such theatre the average car capacity of the known theatres in the particular territory was then added to the gross car capacities of the territory in order to project the most probable totals. Theatres so treated represent less than 4% of the grand total.

THEATRE CATALOG prepared and sent out to each of the more than 100 members of this news bureau, all knowledge which its files reflected about the drive-in theatres of their particular territories, and instructed that they conduct a thorough cross-check of this data with all important local theatre supply dealers, and with major and minor film exchanges, so that the returns they submitted would have a maximum of data from every available source. Extra bonuses were paid for this activity, and, in some cases three and four different staff members checked a particular territory, with their combined findings being later analyzed and compiled into one list in the publishing offices.

Discrepancies of any nature, lack of, or conflicting, addresses, and other unverified data, were sent back into the territories time and time again for clarification until it was concluded that further effort would still prove unsatisfactory. However, to the credit of the staff that completed this survey, it must be pointed out that the unverified data, on operating theatres, represents less than 4% of the total.

As a further precaution, several months after the final form closing date of this 1949-50 Edition, but before these last forms were printed, a first-class mailing was conducted to the theatre or owner of each of the 1753 listed, so that any undeliverable postal addresses might be checked and either reconciled or deleted.

Census Findings

From the data so established, the several summaries by territorial limits and by states have been prepared. They indicate a current total of 1753 drive-in theatres or a gross increase of more than 1000 since the MPA survey conducted during the months of July and August, 1948, and carried in full in the 1948-49 Edition. To further accent the speed of this numerical growth, it should be pointed out that 300 drive-in theatres was the industry's maximum estimate at the end of 1947, so that the current total represents a nearly 500% increase during the past two-year period.

It is also interesting to note that, contrasted to the 416-car average size of the MPA survey's 748 theatres, the current average size of the nation's 1753 drive-in theatres is 474 cars. Thus there is a tendency toward larger theatres with their resultant greater facilities.

In addition to these 1753 operating theatres, there were found to be a total of 27 closed or abandoned drive-ins averaging 217 cars each. This total compares to the 13 closed theatres, averaging 244 cars each as found in the MPA survey of over one year ago. Just as in the former survey, this would seem to indicate that when competition develops, it is the smaller "cow pasture" theatre with relatively minor facilities that cannot stand the pressure and passes from the scene. Seemingly definite proof of this can be found in the Charlotte, N. C. film distribution territory, where a total of 8 closed drive-in theatres aggregate only 1325 cars; or an average of 166 cars per closed theatre.

Analysis by Film Territory

A definite trend can also be noted toward building of larger car capacity theatres in the territories possessing the greatest population concentration. Film distribution territories with the largest number of drive-in theatres are as follows:—

Territories	Theatres
1. Dallas	203
2. Charlotte	179
3. Atlanta	126
4. Cincinnati	99
5. St. Louis	73
6. Pittsburgh	72
7. Boston	70
8. Cleveland	67
9. Indianapolis	66
10. Washington, D. C.	65

DRIVE-IN THEATRES and Their CAR CAPACITIES BY STATES

NOTE: Only operating theatres, or those due to operate during the 1950 Season, are included in these totals.

State:	*No. of Theatres*	*Total Cars*	*Ave. Cars*
Alabama	31	12,266	396
Arizona	10	5,876	588
Arkansas	27	10,670	395
California	94	62,239	662
Colorado	17	8,642	508
Connecticut	9	4,759	529
Delaware	3	1,650	550
Florida	57	24,278	426
Georgia	31	12,875	415
Idaho	15	5,320	355
Illinois	72	47,980	666
Indiana	60	28,407	473
Iowa	37	16,449	445
Kansas	33	15,015	455
Kentucky	36	15,971	441
Louisiana	32	13,623	426
Maine	13	7,317	563
Maryland	10	4,535	454
Massachusetts	38	20,771	547
Michigan	42	23,571	561
Minnesota	19	9,153	482
Mississippi	19	7,883	415
Missouri	42	23,994	571
Montana	7	3,061	438
Nebraska	12	5,280	440
Nevada	2	816	408
New Hampshire	9	3,600	400
New Jersey	17	11,970	704
New Mexico	13	5,193	399
New York	71	34,049	480
No. Carolina	123	28,766	234
No. Dakota	5	1,930	586
Ohio	134	54,847	409
Oklahoma	36	17,433	484
Oregon	11	5,535	503
Pennsylvania	105	57,809	551
Rhode Island	3	2,117	706
South Carolina	56	12,917	231
South Dakota	12	4,584	382
Tennessee	23	8,635	375
Texas	196	74,242	380
Utah	18	8,270	459
Vermont	7	2,360	337
Virginia	51	17,684	347
Washington	18	8,970	499
West Virginia	39	12,957	332
Wisconsin	22	12,674	576
Wyoming	15	4,791	320
Total	1753	784,645	447

However, the largest total car capacities in the 31 film distribution territories displaced many of these leaders with the following round total results:—

Territories	Cars
1. Dallas	77,000
2. Atlanta	51,000
3. St. Louis	43,000
4. Cincinnati	42,000
5. Charlotte	42,000
6. Los Angeles	41,000
7. Philadelphia	39,000
8. Boston	36,000
9. Pittsburgh	31,000
10. Chicago	30,000

Of equal interest is a study of the largest average car capacity of the theatres in particular film distribution territories which again changes this order to the following leadership that more closely follows population concentrations:—

Territories	Car Average
1. Chicago	777
2. Los Angeles	714
3. New York	636
4. Philadelphia	633
5. Milwaukee	588
6. St. Louis	584
7. San Francisco	574
8. Buffalo	570
9. Detroit	561
10. New Haven	529

Several of the territories that loom large in the total number of drive-in theatres have actually the smallest average car capacity as indicated below:—

Territories	Car Average
1. Charlotte	233
2. Albany	351
3. Washington, D. C.	355
4. Dallas	381
5. Cleveland	388
6. Atlanta	405
7. New Orleans	407
8. Salt Lake City	411
9. Denver	421
10. Cincinnati	423

Analysis by State

While drive-in theatres are found in each and every one of the 48 states, although there are none in the District of Columbia, their total number in each state varies from the minimum of 2 in the state of Nevada to the maximum of 196 in the state of Texas. The following possess the greatest number of drive-in theatres within their state confines:—

States	Theatres
1. Texas	196
2. Ohio	134
3. North Carolina	123
4. Pennsylvania	105
5. California	94
6. Illinois	72
7. New York	71
8. Indiana	60
9. Florida	57
10. South Carolina	56

Once again, the number of theatres does not necessarily reflect the total car

capacity of the particular state to the place where the following possess the largest total car capacities:—

States	Cars
1. Texas	74,000
2. California	62,000
3. Pennsylvania	58,000
4. Ohio	55,000
5. Illinois	48,000
6. New York	34,000
7. North Carolina	29,000
8. Indiana	28,000
9. Florida	24,000
10. Missouri	24,000

While gross numbers of theatres and of car capacities are important, they seem to have little bearing on the largest average car capacities of particular states which are tabulated as follows:—

States	Car Average
1. Rhode Island	706
2. New Jersey	704
3. Illinois	666
4. California	662
5. Arizona	588
6. North Dakota	586
7. Wisconsin	576
8. Missouri	571
9. Maine	563
10. Michigan	561

States with the smallest average car capacities are:—

States	Car Average
1. South Carolina	231
2. North Carolina	234
3. Wyoming	320
4. West Virginia	332
5. Vermont	337
6. Virginia	347
7. Idaho	355
8. Tennessee	375
9. Texas	380
10. South Dakota	382

Conclusion

On the pages that follow are the detailed listings of individual theatres from which the above were drawn. Naturally, there is a human element in their compiliation so that the publishers do not guarantee the complete accuracy of all listings. A conscientious effort, sparing no time or dollars, has been made in order to produce a list that up to the present time has not been in existence; and that is felt to be the most "knowledge-full" that it is possible to produce until the drive-in field solidifies itself. An organization has been set up in order to maintain the maximum accuracy of this list during the weeks and months of continued drive-in theatre expansion which lie ahead; but changes will naturally be on a daily basis. Its use, therefore, as a mailing list without timely alteration is not recommended, and can only be allowed following the granting of permission by the publishers who will be aware of its continuing change.

A LISTING BY DISTRIBUTION TERRITORIES

NOTE: Best available address for the theatre itself will be found immediately behind the theatre name, and lacking such address, the town itself will suffice. In many cases, there is no post office for particular towns, and accordingly, the mailing address of the executive is listed behind his name.

The various symbols used are as follows: (UNC) indicates that the particular theatre is under construction, but has not yet opened as of March 1, 1950. For all such theatres, it was attempted to verify that actual construction operations had been started, and/or that equipment had been purchased so that it could be relatively certain to open during the 1950 season. (M) indicates the length of the season in months operated by the particular theatre, i.e. (M8) meaning "8 months." (C) indicates the car capacity of the particular theatre, i.e. (C720) means the particular theatre contains "720 car parking areas" adjacent to available sound. (D) indicates the number of days per week which the particular theatre operates, i.e. (D7) means that the theatre operates "7 days each week."

Wherever any data is not yet recorded or available after continued rechecking in the field an (°) has been substituted.

Where particular theatres are operated by circuits or executives from outside of the particular town or state, some effort has been made to identify their headquarters or home address.

ALBANY TERRITORY

New York

Albany, N. Y. MENANDS DR., 55 Peyster St. Exec: Joe Miller. (M6-C475-D7)

Alexandria Bay, N. Y. THOUSAND ISLAND DR. Exec: Mrs. A. McNamara. (M6-C175-D7)

Canton, N. Y. SUNSET DR., Canton Road, Rt. 68. Exec: D. Gilson. (M6-C200-D7)

Colonie, N. Y. MOHAWK DR., Schenectady-Albany Rd. Exec: Neil Hellman. (M6-C750-D7)

Colonie, N. Y. SARATOGA DR., Saratoga Rd. Exec: Neil Hellman. (M6-C450-D7)

Crown Point, N. Y. SKYLINE DR. Exec: Arthur Landry. (M6-C300-D7)

East Greenbush, N. Y. AUTO VISION DR., Rts. 20 and 9. Exec: Dave Willig. (M6-C350-D7)

Fonda, N. Y. FONDA DR. Exec: Francis Willette. (M6-C200-D7)

Guilderland, N. Y. CARMAN DR. Exec: John Marotta. (M6-C400-D7)

Hudson, N. Y. SUNSET DR., Rt. 9. Exec: Frieder and Grossman. (M6-C450-D7)

Hunter, N. Y. MOUNTAIN VIEW DR. Exec: Mrs. F. Klein. (M6-C375-D7)

Lake George, N. Y. LAKE GEORGE DR., Rt. 9. Exec: Harry Lamont. (M6-C300-D7)

Lake Placid, N. Y. SARA-PLACID DR., P.O. Box 528. Exec: Edward Hoffman. (M6-C° -D7)

Leeds, N. Y. OPEN AIR TH., Rt. 23. Exec: Harry Lamont. (M6-C150-D7)

Little Falls, N. Y. VALLEY DR. Exec: Robert Baranoff. (M6-C350-D7)

Malone, N. Y. FRANKLIN DR., 182 Elm St. Exec: W. A. Shaw. (M6-C300-D7)

Malta, N. Y. MALTA AUTO MOVIE. Exec: Sarto J. Smaldone. (M6-C300-D7)

Massena, N. Y. SUNSET DR., Rt. 37. Exec: D. Gilson. (M6-C250-D7)

North Hoosick, N. Y. HATHAWAY DR. Exec: F. Chase Hathaway. (M6-C400-D7)

Norwich, N. Y. NORWICH DR. Exec: Harry Root. (M6-C500-D7)

Ogdensburg, N. Y. RIVERSIDE DR., Rt. 7. Exec: J. F. Free, Turnbull and Morley. (M6-C250-D7)

Oneonta, N. Y. DEL SEGO DR. Exec: Bert D. Mitchel and William Warnken, Sr. (M6-C300-D7)

Plattsburg, N. Y. PLATTSBURG DR., P.O. Box 203. Exec: R. R. Berry. (M5-C400-D7)

Plattsburg, N. Y. STAR DUST DR., 291 Margaret St. Exec: Ira Henry. (M6-C350-D7)

Potsdam, N. Y. MOONLITE DR., Norwood Road, Rt. 56. Exec: A. Pappayahokos. (M6-C275-D7)

South Glens Falls, N. Y. AUST'S DR., Rt. 9. Exec: William H. Aust. (M6-C312-D7)

Stillwater, N. Y. HUDSON RIVER DR. Exec: Frank J. Carilli. (M6-C400-D7)

Utica, N. Y. KALLET DR., Utica-Rome Road. Exec: M. Kallet. (M6-C450-D7)

Utica, N. Y. WGAT DR., Kempf Blvd. Exec: J. Eric Williams. (M6-C400-D7)

Vails Mills, N. Y. VAILS MILLS DR., Rt. 30. Exec: Harry Lamont. (M6-C350-D7)

Voorheesville, N. Y. INDIAN LADDER DR. Exec: Hallenbeck and Riley. (M6-C300-D7)

Watertown, N. Y. STARLITE DR., Adams-Watertown Road, Rt. 11. Exec: Slotnick and Cantor. (M6-C275-D7)

ATLANTA TERRITORY

Alabama

Albertville, Ala. MARSHALL DR. Exec: W. W. Hammonds, Jr., A. W. Hammond and Cullen B. Goss. (M12-C500-D7)

Alexander City, Ala. BAMA DR. Exec: John Rodney. (M12-C350-D6)

Anniston, Ala. SKYWAY DR., 505 Goodwin St. Exec: J. E. Aaron. (M12-C275-D7)

Auburn, Ala. AUBURN OPELIKA DR., Hwy. 19. Exec: John Cazes and Louis Soult. (M12-C320-D7)

Bessemer, Ala. AUTO MOVIES No. 1, P.O. Box 415. Exec: J. C. Worthington. (M12-C275-D7)

Bessemer, Ala. BESSEMER DR., Rt. 8. Exec. (°). (M12-C° -D7)

Birmingham, Ala. FAIR PARK DR., Hwy. 31. Exec: N. H. Waters, Waters Theatre Co. (M9-C350-D6)

Birmingham, Ala. ROEBUCK DR., Hwy. 11. Exec: N. H. Waters, Waters Theatre Co. (M12-C500-D7)

Birmingham, Ala. SHADES MT. DR., Hwy. 31. Exec: N. H. Waters, Waters Theatre Co. (M12-C500-D7)

Clanton, Ala. CLANTON DR., P.O. Box 222. Exec: J. A. Jackson. (M8-C416-D6)

Cullman, Ala. DRIVE IN, P.O. Box 21. Exec: Brown-Jones. (M12-C290-D6)

Decatur, Ala. SUNSET DR., P.O. Box 1157. Exec: Crescent Amusement Co. (M12-C400-D6)

Dothan, Ala. SKI-VUE DR. Exec: Martin Davis Theatres Ct. (M9-C400-D7)

Gadsden, Ala. DRIVE IN, Anniston Hwy. Exec: B. W. Wright. (M12-C422-C7)

Huntsville, Ala. DRIVE IN, P.O. Box 558, Whitesburg. Exec: F. H. Thomas. (M9-C300-D6)

Jasper, Ala. 78 DR. Exec: J. M. Miller. (M12-C325-D6)

Manchester, Ala. MANCHESTER DR., Hwy. 5. Exec: C. E. Crouch, 1009 Highland Ave., N., Jasper, Ala. (M12-C200-D6)

Montgomery, Ala. DRIVE IN, Hwy. 31. Exec: R. J. Barnes. (M12-C350-D7)

Montgomery, Ala. FAIRVIEW DR. Exec: Wilby-Kincey Theatres Ct. (M12-C1550-D7)

Muscle Shoals, Ala. TRI-CITIES DR., 2nd and Baker Hwy. Exec: A. D. Thompson and J. C. Hannah. (M12-C250-D7)

Opelika, Ala. DRIVE IN, Rt. 3. Exec: R. V. Crumpton. (M9-C250-D6)

Opp, Ala. MIDWAY DR. Exec: H. Barnes and J. E. Dee. (M12-C300-D7)

Oxford, Ala. SKYWAY DR. Exec: J. E. Aaron. (M9-C275-D6)

Prattville, Ala. PRATT-MONT DR. Exec: (*). (M9-C* -D7)

Russellville, Ala. KING DR. Exec: Lee King. (M9-C250-D7)

Selma, Ala. SEL-MONT DR. Exec: Wilby-Kincey Theatres Ct. (M12-C500-D7)

Sylacuga, Ala. COMET DR. Exec: Martin Theatres Ct. (M10-C350-D7)

Talladega, Ala. TALLADEGA DR. Exec: Martin Theatres Ct. (M10-C435-D7)

Tallassee, Ala. TALA-C DR. Exec: McLendon Theatres Ct., Union Springs. (M12-C400-D7)

Troy, Ala. STARLITE DR. Exec: Troy Drive-In Theatres, Inc. (M12-C300-D6)

Florida

Auburndale, Fla. OUTDOOR DR. Exec: Outdoor Amusement Co. (M12-C325-D7)

Brandenton, Fla. DRIVE IN. Exec: Charles Hanson. (M12-C219-D7)

Brooksville, Fla. 41 DR. Exec: W. F. Saxon. (M12-C400-D7)

Clearwater, Fla. GULF-TO-BAY DR. Exec: Ames, Shingler and Partlow. (M12-C500-D7)

Clearwater, Fla. OUTDOOR DR., Hwy. 19. Exec: Owen W. Philpott. (M12-C250-D7)

Coral Gables, Fla. CORAL WAY AUTO TH., 1080 Coral Way (SW 24th St.). Exec: (*). (M12-C550-D7)

Dade City, Fla. JOY-LAN DR. Exec: Carl Floyd. (M12-C250-D7)

Dania, Fla. DANIA DR., Dania Beach Rd., P.O. Box 478. Exec: Edward McCloskey. (M12-C* D7)

Daytona Beach, Fla. DRIVE IN, Deland Road. Exec: R. E. Beck. (M12-C375-D7)

De Land, Fla. DE LAND OUTDOOR TH. Exec: R. E. Hawker and H. W. Alexander. (M12-C300-D7)

Dover, Fla. PLANT CITY DR. Exec: Charles R. Hanson. (M12-C500-D7)

Eustis, Fla. TRIANGLE OUTDOOR TH. Exec: J. R. Dickson, Golden Triangle Theatres. (M12-C400-D7)

Ft. Collins, Fla. FT. COLLINS DR. Exec: Floridale Company, Inc. (M12-C375-D7)

Ft. Lauderdale, Fla. DRIVE IN, W. Broward Blvd. at Wingate Rd. Exec: Al Rook. (M12-C500-D7)

Ft. Pierce, Fla. FT. PIERCE DR. Exec: Sam D. Bennett. (M12-C500-D7)

Gainesville, Fla. DRIVE IN, 3000 Hawthorne Road. Exec: K. T. Barfield. (M12-C300-D7)

Hallandale, Fla. HALLANDALE DR., Hwy. 1. Exec: S. Arthur Ashworth, 335 New York St., Hollywood. (M12-C500-D7)

Homestead, Fla. BREEZEWAY DR. Exec: C. B. Chambers. (M12-C350-D7)

Jacksonville, Fla. AIR BASE DR. Exec: Lahoca Theatres. (M12-C425-D7)

Jacksonville, Fla. DRIVE IN, Beach Road. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. (M12-C361-D7)

Jacksonville, Fla. SKYVIEW DR., 1887 Kings Road. Exec: Roy Benjamin. (M12-C375-D7)

Lakeland, Fla. SILVERMOON DR., Hwy. 92. Exec: I. C. Mize. (M12-C400-D7)

Lake Worth, Fla. DIXIE SKYDROME DR., 2515 N. Dixie Hwy. Exec: Walter E. Foley and Walter A. Cantor. (M12-C600-D7)

Leesburg, Fla. CREST DR. Exec: M and M Theatres. (M12-C314-D7)

Lockhart, Fla. RI-MAR DR., P.O. Box 258. Exec: Ben Rivers, Jack Martin, Sam Manning. (M12-C400-D7)

Miami, Fla. BOULEVARD DR., Biscayne Blvd., Rt. 1 at 143rd St. Exec: Wometco Ct. (M12-C500-D7)

Miami, Fla. DIXIE DR. Rt. 2, P.O. Box 675. Exec: Martin Wucher (M12-C450-D7)

Miami, Fla. LE-JEUNE AUTO PARK. Exec: N. H. Bernstein. (M12-C550-D7)

Miami, Fla. MIAMI DR., 7th Avenue at 81st. Exec: E. M. Loew Ct. (M12-C1000-D7)

Miami Beach, Fla. TROPICAIRE DR., Blvd., and Palmetto Rds. Exec: W. L. McComas. (M12-C700-D7)

Ocala, Fla. DRIVE IN, Rt. 441. Exec: Carl C. Howell. (M12-C550-D7)

Orlando, Fla. KUHL AVE. DR., 2400 Kuhl Ave. Exec: Jim Partlow. (M12-C400-D7)

Orlando, Fla. ORLANDO DR., P.O. Box 1214, Orange Blossom Trail. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. (M12-C298-D7)

Panama City, Fla. DRIVE IN, N.W. 15th St. Exec: Bud Davis. (M12-C355-D7)

Perrine, Fla. DIXIE DR. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. (M12-C450-D7)

St. Augustine, Fla. BEACH DR. Exec: Ray S. Ettel and Edw. Douglass. (M12-C550-D7)

St. Cloud, Fla. DRIVE IN. Exec: C. Paulley and E. F. Heinz. (M12-C395-D7)

St. Petersburg, Fla. DRIVE IN, 4th St. and 72nd Ave. Exec: Florida State Theatres Ct. (M12-C400-D7)

St. Petersburg, Fla. GULF WIND DR. Exec. O. W. Philpott. (M12-C700-D7)

St. Petersburg, Fla. SKYVUE DR. Exec: C. C. Sutton. (M12-C426-D7)

Sanford, Fla. MOVIELAND RIDE IN. Exec: Sanford Auto Theatres, Inc. (M12-C300-D7)

Sarasota, Fla. TRAIL DR., Tamiami Trail. Exec: Hugh Thomas. (M12-C250-D7)

Tallahassee, Fla. CAPITOL DR., Apalachicola Hwy. Exec: Talgar Theatres. (M12-C348-D7)

Tampa, Fla. AUTO PARK, Beachcomber Road. Exec: S. E. Britton. (M12-C500-D7)

Tampa, Fla. DRIVE IN, E. 6th St. Exec: Florida State Theatres. (M12-C400-D7)

Tampa, Fla. FUL-LAN DR. Exec: P. J. Sones and S. T. Wilson. (M11-C650-D7)

Tampa, Fla. SKY WAY DR., N. Florida Ave. Exec: Troy Martin. (M12-C250-D7)

Tarpon Springs, Fla. PLEASANT VALLEY DR., Rt. 19. Exec: James F. Hall. (M12-C275-D7)

Vero Beach, Fla. VERO BEACH DR. Exec: Talgar Theatres. (M12-C500-D7)

W. Palm Beach, Fla. DRIVE IN, S. Blvd. and Haverhill Rd. Exec: C. M. Hall. (M12-C500-D7)

W. Palm Beach, Fla. RIVIERA DR. Exec: Acres Drive-In Theatres. (M12-C400-D7)

Winter Haven, Fla. OUTDOOR DR., Hwy 17. Exec: Owen M. Philpott. (M12-C300-D7)

Winter Park, Fla. WINTER PARK DR. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. (M12-C700-D7)

Georgia

Arco (Brunswick), Ga. SUNSET DR., Jacksonville Hwy., P.O. Box 7. Exec: J. Mann. (M9-C400-D7)

Athens, Ga. DRIVE IN. Exec: Fred Raney and T. C. Hatchett. (M9-C300-D6)

Atlanta, Ga. PIEDMONT DR., 2426 Piedmont Rd., N.E. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. (M12-C650-D7)

Atlanta, Ga. STARLIGHT DR., 2000 Moreland Ave. Exec: Fred Coleman, Eastpoint Amusement Ct. (M12-C900-D7)

Atlanta, Ga. STEWART DR., Stewart Ave. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. (M12-C650-D7)

Augusta, Ga. AUGUSTA DR., Sandbar Ferry Rd., P.O. Box 56. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. (M12-C315-D7)

Augusta, Ga. SKYVIEW DR., Olive Rd. Exec: (*). (M10-C650-D7) (plus 1,000 seats)

Brunswick, Ga. HIWAY DR., Hwy. 17. Exec: High Smith and Mike. (M6-C150-D6)

Brunswick, Ga. STARLIGHT DR. Exec: E. H. Diemer. (M12-C325-D6)

Camilla, Ga. DRIVE IN. Exec: Dunn Brothers. (M12-C300-D7)

Cartersville, Ga. SKYWAY DR. Exec: Jimmy Harris. (M12-C400-D7)

Chatsworth, Ga. COHUTTA DR. Exec: W. W. Fincher. (M7-C200-D6)

Columbus, Ga. COLUMBUS DR. Exec: Martin Theatres Ct. (M12-C700-D7)

Columbus, Ga. DRIVE IN, Ft. Benning Road. Exec: F. S. Shingler. (M12-C300-D7)

Columbus, Ga. REX VIEW DR., 24th St. and River Road. Exec: William K. Jenkins, Ga. Th. Co. (M12-C450-D7)

Conyers, Ga. HUB DR., Mansfield Hwy. Exec: Hub Drive-In Company. (M7-C300-D7)

Dalton, Ga. CALHOUN DR. Exec: W. E. Fischer. (M12-C300-D6)

Decatur, Ga. STARLIGHT DR. Exec: Fred Coleman, East Point Amuse. Ct. (M12-C800-D7)

Dublin, Ga. DRIVE IN. Exec: Martin Theatres Ct. (M12-C300-D6)

Fort Valley, Ga. No. 7 DR. Exec: Jones and Harris. (M12-C200-D7)

Gainesville, Ga. SKYWAY DR., Hwy. 19. Exec: John Thompson. (M12-C200-D7)

Griffin, Ga. GETZEN DR., North Hill St. Ext. Exec: R. W. Getzen. (M12-C250-D6)

La Grange, Ga. LA GRANGE DR., Hwy. 29. Exec: O. C. Lam, Lam Amusement Ct. (M12-C500-D6)

Macon, Ga. DIXIE DR., Old Jeffersonville Rd., P.O. Box 397. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. (M12-C327-D7)

Manchester, Ga. CIRCLE DR. Exec: H. R. Richards. (M12-C250-D6)

AN ISLAND BOXOFFICE capable of handling the traffic flow of two lanes serves the 400-car CAPITOL, TALLAHASSEE, FLA., owned by Talgar Theatres Co. It uses RCA sound and speakers and Simplex projectors. Dealers were Southeastern of Florida and NTS of Atlanta.



Moultrie, Ga. DRIVE IN, Quitman Road. Exec: R. T. Moody. (M12-C200-D7)

Putney, Ga. SOWEGA AUTO, Camilla Hwy. Exec: M. C. Dunford. (M12-C350-D7)

Rome, Ga. CEDAR VALLEY, Hwy. 27 and Cave Spring Rd. Exec: O. C. Lam, Lam Amuse. Ct. (M12-C700-D6)

Savannah, Ga. DIXIE DR., Victory Drive. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. (M12-C234-D7)

Savannah, Ga. HIGHWAY 80 DR., P.O. Box 1455. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. (M12-C700-D7)

Thomasville, Ga. DRIVE IN, Hwy. 19. Exec: W. C. Matthews (closed). (M8-C150-D6)

Thomasville, Ga. HI-WAY DR., Thomasville-Tallahassee Hwy. Exec: N. W. Williams, Interstate Enterprises Ct. (M12-C324-D6)

Valdosta, Ga. FORREST DR., P.O. Box 674. Exec: R. T. Moody. (M12-C300-D6)

Vidalia, Ga. DAVIS DR., Lyon Rd. Exec: S. B. Davis. (M12-C350-D7)

Woodbury, Ga. DRIVE IN. Exec: Gene Blue. (M12-C100-D7)

Waycross, Ga. DRIVE IN, Hwy. 1. Exec: William K. Jenkins, Georgia Theatre Co. (M12-C500-D7)

Tennessee

Alcoa, Tenn. LAKEMONT DR., Hwy. 129. Exec: Faree, Pemberton, Milligan. (M12-C250-D7)

Athens, Tenn. STARLITE DR., P.O. Box 297. Exec: C. Glendake. (M9-C200-D7)

Chattanooga, Tenn. SKYWAY DR., Brainerd Rd. Exec: Don Shaw. (M12-C400-D7)

Cleveland, Tenn. CLEVELAND DR., Harrison Rd. Exec: G. B. Oldum, Walter L. Morris. (M10-C250-D6)

Cookeville, Tenn. YOUNG'S DR., Hwy. 70. Exec: Benton Young. (M12-C200-D6)

Dayton, Tenn. RHEA DR., Rt. 2. Exec: Condon Graham. (M9-C300-D6)

Fountain City, Tenn. SKYWAY DR., 6222 Broadway. Exec: G. D. Baker. (M12-C450-D6)

Greenville, Tenn. DRIVE IN. Exec: Ernest Knight. (M8-C250-D6)

Johnson City, Tenn. KING SPRINGS DR. Exec: Bernie Wylie. (M9-C400-D7)

Johnson City, Tenn. TRI-CITIES DR., Johnson City-Bristol Hwy. Exec. Bernie Wylie. (M12-C300-D7)

Knoxville, Tenn. DRIVE IN, 3546 Kingston Pike. Exec: R. J. Barnes. (M12-C511-D7)

Knoxville, Tenn. STARLITE DR. Exec: Tim Smith. (M12-C400-D7)

Morristown, Tenn. SKYLINE DR. Exec: G. D. Baker. (M12-C189-D6)

Nashville, Tenn. CRESCENT DR., Murfreesboro Pike. Exec: Kermit Stengel, Crescent Amuse. Ct. (M7-C350-D7)

Nashville, Tenn. DRIVE IN. Exec: Colonial Drive-In Theatres Corp. (M7-C600-D7)

Oak Ridge, Tenn. SKYWAY DR., Oak Ridge Turnpike. Exec: W. J. Hatfield. (M9-C300-D7)

Shelbyville, Tenn. 41 DR. Exec: J. M. Miller. (M10-C315-D6)

Sparta, Tenn. PARK-A-WAY, Sparta-Cookeville Hwy. Exec: Jack Mitchell. (M12-C300-D7)

BOSTON TERRITORY

Maine

Auburn, Me. DANVILLE DR. Exec: Collin and Wood. (M7-C550-D7)

Brewer, Me. DRIVE IN. Exec: E. M. Loew Ct., Boston, Mass. (M7-C800-D7)

Brunswick, Me. BRUNSWICK DR. Exec: George R. Gould, 91 Brentwood St., Portland 5, Me. (M6-C450-D7)

Caribou, Me. POLARIS DR. Exec: Gordon Wilcox. (M7-C500-D7)

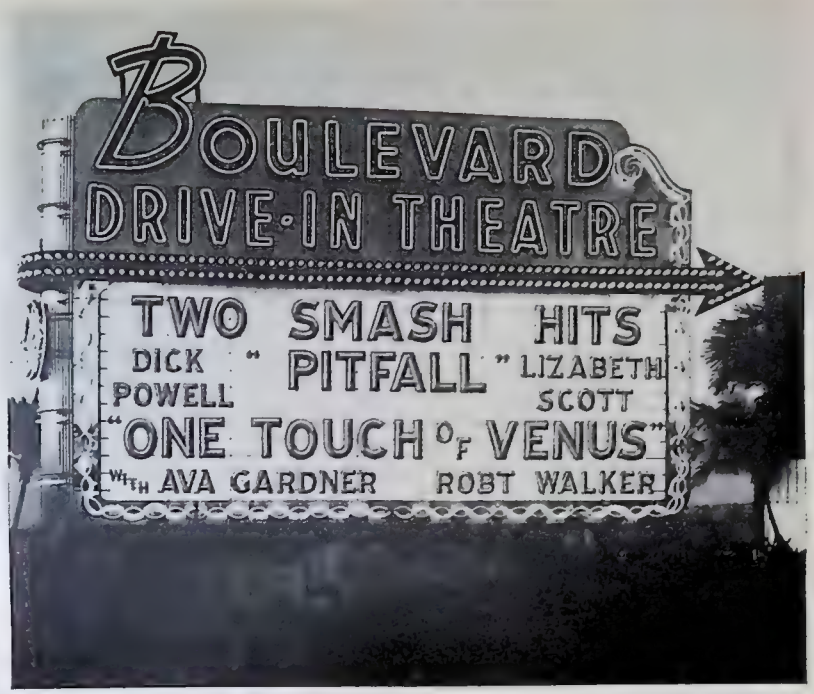
Houlton, Me. BORDERLAND AUTO TH., US Rt. 1. Exec: H. Peabody and Lewis Webber. (M6-C450-D7)

Lewiston, Me. LEWISTON DR., P.O. General Delivery. Exec: Lockwood and Gordon Ct., Boston, Mnss. (M7-C1000-D7)

Presque Isle, Me. PRESQUE ISLE DR. Exec: Gordon Wilcox. (M7-C150-D7)

Rumford, Me. RUMFORD DR. Exec: E. Pollard. (M7-C400-D7)

Saco, Me. SACO AUTO DR., Rt. 1. Exec: Eugene Boragine. (M5-C300-D7)



DISPLAY SIGNS AND ATTRACTION BOARDS must be large and easily read in order to convey the entertainment message to moving traffic. At the BOULEVARD, MIAMI, FLORIDA, full use is made of 10 and 17 inch Adler two-tone "Third Dimension" plastic letters, and the directional arrow helps the effect.

Sanford, Me. SANFORD DR., P.O. Box 415. Exec: Russell Martin. (M7-C* -D7)

Scarboro, Me. PORTLAND DR., P.O. Box 7. Exec: Lockwood and Gordon Ct., Boston, Mnss. (M7-C950-D7)

Waterville, Me. WINSLOW DR. Exec: Lockwood and Gordon Ct. (M6-C700-D7)

Windham, Me. WINDHAM DR. Exec: William Friday. (M7-C350-D7)

Massachusetts

Agawam, Mass. RIVERSIDE PARK-IN TH., Rt. 5. Exec: Edward Carroll (closed). (M7-C500-D7)

Avon, Mass. AVON DR. Exec: Interstate Ct. (M7-C800-D7)

Bellingham, Mass. BELLINGHAM AUTO TH., Pulaski Blvd. Exec: L. Ricker. (M6-C200-D7)

Brockton, Mass. AIRPORT DR. Exec: E. M. Loew Ct. (M7-C1000-D7)

Charlmont, Mass. CHARLMONT AUTO TH. Exec: C. Nilmnn. (M6-C200-D7)

Chicopee Falls, Mass. AIR-LINE DR. Exec: John S. Coughlan, 895 Worthington St., Springfield. (M7-C* -D7)

Dalton, Mass. BRIGGS OPEN AIR TH., Rt. 9. Exec: Briggs Open Air Thea., Inc. (M6-C400-D7)

Dartmouth, Mass. DARTMOUTH AUTO TH., Rt. 6. Exec: W. Yamin. (M8-C500-D7)

Dedham, Mass. DEDHAM DR., Elm St., Rt. 1. Exec: Michael Redstone. (M8-C1000-D7)

East Dennis, Mass. DENNIS AUTO TH. Exec: Louis Segrini. (M8-C1000-D7)

Fitchburg, Mass. WHALOM PARK DR., Electric Ave. Exec: Silvio Williams. (M7-C* -D7)

Haverhill, Mass. RIVERVIEW DR., 901 River Rd. Exec: Ross Chilpylan. (M5-C375-D7)

Holyoke, Mass. WEST SIDE DR. Exec: E. M. Loew Ct. (M7-C800-D7)

Lanesboro, Mass. SUNSET PARK AUTO TH., Rt. 7. Exec: Fred Cloutier (UNC). (M6-C500-D7)

Lynn, Mass. LYNN OPEN AIR TH., Rt. 1A. Exec: E. M. Loew Ct. (M7-C500-D7)

Medford, Mass. MEADOW GLEN DR., Mystic Valley Pkwy. Exec: Paul Longo. (M7-C1000-D7)

Mendon, Mass. MENDON AUTO TH., P.O. Box 274. Exec: Fred Parker. (M6-C100-D7)

Methuen, Mass. MERRIMAC PARK DR., Merrimac Park Dr. Exec: E. M. Loew Ct. (M7-C325-D7)

Natick, Mass. NATICK AUTO TH. Exec: Phil Smith Ct. (M7-C1000-D7)

North Attleboro, Mass. BORO DR. Exec: Joe Stanzler, 300 Morris Ave., Providence, R. I. (M7-C875-D7)

Northfield, Mass. AUTO TH. Exec: C. Nilman, Shelburne Falls, Mass. (M6-C300-D7)

North Wilbraham, Mass. PARKWAY DR., Boston Rd. Exec: David Willig. (M7-C750-D7)

Palmer, Mass. MET AIRPORT DR. Exec: L. Micelli. (M6-C300-D7)

Raynham, Mass. DRIVE IN, Rt. 128. Exec: J. Guarino. (M6-C600-D7)

Revere, Mass. REVERE DR., Squire Rd. Exec: Michael Redstone. (M7-C400-D7)

Salisbury, Mass. SALISBURY AUTO TH., Beach Rd. Exec: Al Rudenstein. (M8-C400-D7)

Saugus, Mass. SAUGUS DR., Rt. 1. Exec: American Theatres Corp. Ct., Boston, Mass. (M7-C400-D7)

Seekonk, Mass. BAY STATE DR., Rt. 6. Exec: Romano Brothers. (M8-C500-D7)

Shrewsbury, Mass. OPEN AIR AUTO TH., Rt. 9. Exec: American Theatres Corp. Ct., Boston, Mass. (M7-C550-D7)

South Deerfield, Mass. VALLEY VIEW DR. Exec: King and MacLeod. (M6-C250-D7)

Southampton, Mass. RED ROCK DR. Exec: Alex Yamakowski. (M6-C400-D7)

Springfield, Mass. RIVERSIDE PARK DR. Exec: E. Carroll. (M6-C500-D7)

Sturbridge, Mass. DOLLY DR. Exec: Peter J. Marrone. (M6-C400-D7)

Sutton, Mass. MOTOR IN TH., Providence Rd. Exec: Wilfred Bernard. (M7-C500-D7)

Tyngsboro, Mass. DRIVE IN. Exec: George Abdulla. (M6-C300-D7)

Westbrookfield, Mass. WESTWIND DR., W. Main St. (closed). Exec: James McGovern. (M7-C125-D*)

Westfield, Mass. SUNDOWN AUTO DR., Rt. 202. Exec: Owen Holmes. (M7-C660-D7)

West Pittsfield, Mass. BERKSHIRE DR., 1501 W. Housatonic St. Exec: Harry Lazarus. (M6-C600-D7)

West Springfield, Mass. SPRINGFIELD AUTO TH., Rt. 20. Exec: American Thea. Ct. (UNC). (M6-C* -D7)

Weymouth, Mass. DRIVE IN, Rt. 3A. Exec: American Theatres Corp. Ct., Boston, Mass. (M6-C600-D7)

Wilbraham, Mass. DRIVE IN. Exec: Dave Willig. (M6-C769-D7)

New Hampshire

Claremont, N. H. DRIVE IN. Exec: Robert Zerinsky. (M7-C500-D7)

Gorham, N. H. GRAND-VIEW DR. Exec: E. M. Loew Ct., Boston, Mass. (M7-C* -D7)

Hooksett, N. H. SKI-RAY DR. Exec: Armand Bourgue. (M6-C500-D7)

Keene, N. H. KEENE DR. Exec: Jos. Mathieu. (M6-C400-D7)

Laconia, N. H. DRIVE IN. Exec: Henry Gaudette. (M6-C550-D7)

Manchester, N. H. DRIVE IN. Exec: Jacob Asadorian. (M6-C500-D7)

Manchester, N. H. PINE ISLAND PARK DR., Rt. 3A and 18. Exec: J. A. Sayer. (M3-C300-D7)

Merrimac, N. H. DANIEL WEBSTER. Exec: (*) (closed). (M*-C100-D*)

Somersworth, N. H. STARWAY DR., Rt. 16, P.O. Box 1881. Exec: J. A. Sayer. (M7-C400-D7)

Sunapee, N. H. DRIVE IN. Exec: John and Edward Wentrowski (closed). (M*-C100-D*)

Warner, N. H. SKI-TOW DR. Exec: William Lussier. (M6-C200-D7)

Winchester, N. H. OPEN AIR DR. Exec: C. Nilman, Shelburne Falls, Mass. (M6-C250-D7)

Rhode Island

Cranston, R. I. CRANSTON AUTO TH., Oaklawn Ave. Exec: Meyer Stanzler. (M8-C1000-D7)

Johnston, R. I. HIGHWAY OPEN AIR TH. Exec: A. Petrucci (UNC). (M7-C* -D7)

Providence, R. I. PROVIDENCE DR., Rt. 1. Exec: E. M. Loew Ct. (M9-C600-D7)

Vermont

Bennington, Vt. BENNINGTON DR. Exec: A. R. Wellard and Alonzo. (M5-C250-D7)

Berlin, Vt. TWIN CITY DR. Exec: R. M. Cody. (M6-C250-D7)

Burlington, Vt. SUNSET DR., Rt. 127. Exec: John Gardiner. (M5-C300-D7)

Castleton, Vt. FT. WARREN DR. Exec: F. Chase Hathaway. (M6-C350-D7)

Milton, Vt. DRIVE IN. Exec: A. A. Viens. (M6-C300-D7)

Rutland, Vt. RUTLAND DR. Exec: Norman A. Grimshaw and Edwin A. Morgan. (M6-C360-D7)

St. Albans, Vt. SUNSET DR. Exec: R. J. Ryan. (M5-C550-D7)

BUFFALO TERRITORY

New York

Allegany, N. Y. ALLEGANY DR. Exec: Louis Drew and Harry Berkson. (M7-C452 D7)

Athol Springs, N. Y. SKYWAY-LAKESHORE, Rt. 5. Exec: W. Brett. (M7-C720-D7)

Auburn, N. Y. FINGER LAKES DR., Rt. 5. Exec: Don Wilson. (M7-C290-D7)

Batavia, N. Y. SKYWAY-GENESEE DR. Exec: Wm. Brett. (M7-C400-D7)

Bath, N. Y. BATH DR. Exec: Joseph J. Murphy. (M7-C375-D7)

Bemus Point, N. Y. CHAUTAUQUA DR., Rt. 17. Exec: Blatt Bros. Thea. Ct., Pittsburgh, Pa. (M7-C250-D7)

Blasdell, N. Y. STAR DR., Lake Ave. Exec: Mrs. A. Schick. (M7-C320-D7)

Canandaigua, N. Y. PARKWAY DR., Rt. 5. Exec: Slotnick and Gandell. (M7-C650-D7)

Cheektowaga, N. Y. BUFFALO DR., Harlem Rd. Exec: James Kelly or Wintner, Union Commerce Bldg., Cleveland 14, O. (M7-C650-D7)

Cicero, N. Y. NORTH DR., N. Syracuse-Cicero Rd. Exec: McConnell Read Corp., 116 S. Salina St., Syracuse, N. Y. (M6-C600-D7)

Dryden, N. Y. DRYDEN DR. Exec: H. L. Berinstein. (M7-C600-D7)

Elmira, N. Y. DRIVE IN. Exec: H. L. Berinstein. (M7-C500-D7)

Endicott, N. Y. GEORGE F. DR., George F. Hwy. Exec: Neil Hellman. (M7-C600-D7)

Gasport, N. Y. LOCKPORT DR., Rt. 31. Exec: Walter Dion and Son. (M7-C250-D7)

Greece, N. Y. CENTRAL DR., Spencerport Rd. (Rochester P.O.). Exec: William Tishkoff. (M7-C980-D7)

Kenmore, N. Y. OPEN AIR TH. (UNC). (M7-C* -D7)

Minetto, N. Y. MIDWAY DR., Rt. 48. Exec: R. C. Canter. (M7-C450-D7)

Niagara Falls, N. Y. STARLITE DR., Military Rd. Exec: Robert and Richard Hayman. (M8-C730-D7)

Nimmonsburg, N. Y. FRONT DR. Exec: Herbert Nittke. (M7-C722-D7)

Perry, N. Y. SILVER LAKE DR., Rt. 39, Perry-Castle Rd. Exec: Harry K. Martin. (M7-C175-D7)

Rochester, N. Y. ROCHESTER DR., Scottsville Rd. Exec: J. J. Kelly or Wintner, Union Commerce Bldg., Cleveland 14, O. (M7-C726-D7)

Stafford, N. Y. BATAVIA DR. Exec: Ethan Lenhart. (M7-C400-D7)

Syracuse, N. Y. KALLET DR. Exec: O. J. Kallet. (M7-C800-D7)

Tonawanda, N. Y. DELAWARE DR., 4100 Delaware Ave. Exec: Louis Drew. (M7-C1000-D7)

Tonawanda, N. Y. SKYWAY-NIAGARA, Niagara Falls Blvd. Exec: Wm. Brett. (M7-C700-D7)

Van Buren Point, N. Y. VAN BUREN DR. Exec: Irving Cohen. (M7-C800-D7)

Wallington, N. Y. SKYWAY DR., Rt. 104. Exec: George Mason. (M7-C400-D7)

West Henrietta, N. Y. STARLITE DR. Exec: Don Stevenson. (M7-C600-D7)

West Webster, N. Y. EMPIRE DR. Exec: Graydon Hodges. (M7-C830-D7)

CHARLOTTE TERRITORY

North Carolina

Albemarle, N. C. ALBEMARLE DR. Exec: G. L. Fnw. (M8-C150-D7)

Albemarle, N. C. BADIN ROAD DR., Rt. 2, Hwy. 27. Exec. G. L. Fnw. (M8-C150-D7)

Asheboro, N. C. DRIVE IN, Rt. 220. Exec: Consolidated Ct., P.O. Box 2446, Charlotte, N. C. (M12-C500-D7)

Asheville, N. C. DREAMLAND DR., Hwy. 70. Exec: Ben Pless. (M8-C600-D7)

Asheville, N. C. OUTDOOR DR. Exec: W. C. Macon. (M8-C300-D7)

Aulander, N. C. DRIVE IN. Exec: A. P. Lassiter. (M8-C200-D7)

Belmont, N. C. DRIVE IN, Hwy. 223. Exec: Drive-In Theatres, Inc. P. O. Box 2446, Charlotte, N. C. (M8-C150-D7)

Benson, N. C. BENSON DR. Exec: Mr. and Mrs. Alonzo Parrish. (M8-C* -D7)

Bessemer City, N. C. DRIVE IN. Exec: R. G. Stinette (M8-C200-D7)

Burlington, N. C. DRIVE IN, Hwy. 87. Exec: Consolidated Ct. P.O. Box 2446, Charlotte, N. C. (M12-C400-D7)

Chadbourn, N. C. LUCKY STAR DR. Exec: W. T. Tharrington. (M8-C200-D6)

Chapanoka, N. C. DRIVE IN. Exec: W. O. Gregory (closed). (M8-C125-D7)

Charlotte, N. C. ALBEMARLE ROAD DR. Exec: Harris Robinson, Dixie Drive-In Theatres Ct., Atlanta 3. (M12-C300-D7)

Charlotte, N. C. NORTH 29 DR., Hwy. 29, P.O. Box 1262. Exec: Harris Robinson, Dixie Drive-In Theatres Ct., Atlanta 3. (M12-C500-D7)

Charlotte, N. C. SOUTH 21 DR., Pineville Rd. Exec: H. B. Meiselman Ct., 509 So. Tryon St., Charlotte 2. (M12-C100-D7)

Charlotte, N. C. SOUTH 29 DR., P.O. Box 1262. Exec: Harris Robinson, Dixie Drive-In Theatres Ct. Atlanta 3. (M8-C500-D7)

Charlotte, N. C. YORK ROAD DR., 702 W. 5th St. Exec: Jack Wadsworth. (M12-C400-D7)

Chocowinity, N. C. CHO-CO DR. Exec: Floyd Cox. (M7-C200-D7)

Clinton, N. C. MOTOR PARK DR., Hwy. 42. Exec: C. S. Hayworth. (M7-C200-D7)

Concord, N. C. AIRPORT DR., Hwy. 73. Exec: Lewis K. Whitley. (M8-C200-D6)

Concord, N. C. CONCORD DR., Hwy. 29. Exec: W. P. McClure. (M8-C250-D7)

Concord, N. C. CAROLINA DR., Hwy. 29A, P.O. Box 167. Exec: W. P. McClure. (M8-C200-D7)

Conover, N. C. NEW-CON DR. Exec: Consolidated Ct., P.O. Box 2446, Charlotte, N. C. (M12-C200-D7)

Drexel, N. C. HI PEAK DR. Exec: R. D. Drum. (M7-C175-D7)

Dunn, N. C. CENTER VIEW DR. Exec: H. H. Jordan. (M7-C150-D7)

Durham, N. C. CARO-DUKE DR. Exec: Doug Norton. (M8-C150-D7)

Durham, N. C. CHAPEL HILL ROAD DR., Hwy. 15. Exec: W. T. Marshall, Jr. (M8-C178-D7)

Durham, N. C. MIDWAY DR., Hwy. 70. Exec: J. W. Wallace. (M8-C300-D7)

Durham, N. C. STARLIGHT DR., Hwy. 15. Exec: A. C. Higgsby. (M8-C175-D7)

SEATS FOR WALK-INS are becoming usual practice and at the CHESTER PIKE, EDDYSTONE, PA., Architect David Supowitz combined them with the formerly unusable areas astride the projection ports. Sound is through area horns.



Elkin, N. C. SCENIC DR. Exec: Gordon Billings. (M8-C250-D6)

Fairmont, N. C. NO. 41 DR., Hwy. 41. Exec: Lewis Whitley. (M7-C200-D7)

Fayetteville, N. C. BOULEVARD DR., Hwy. 87, P.O. Box 58. Exec: Howard McNally. (M7-C200-D7)

Fayetteville, N. C. SKYVIEW DR., Hwy. 15A. Exec: James E. Wellons. (M7-C350-D7)

Forest City, N. C. TRI-CITY DR., Rt. 2, P.O. Box 42A. Exec: Jerry Mundy. (M8-C150-D6)

Fuquay Springs, N. C. FIVE POINTS DR., Hwy. 42. Exec: R. E. Tripp. (M7-C150-D6)

Gastonia, N. C. FRIENDLY DR., Hwy. 321. Exec: F. B. Grigg. (M8-C225-D7)

Gastonia, N. C. TOWER DR. Exec: Consolidated Ct., P.O. Box 2446, Charlotte. (M12-C450-D7)

Goldsboro, N. C. MODEL DR., Rt. 5. Exec: A. P. Hinnant. (M8-C150-D7)

Grantsboro, N. C. DRIVE IN. Exec: R. L. Bennett. (M7-C150-D6)

Greensboro, N. C. NORTH DR., Hwy. 29, P.O. Box 732. Exec: Harris Robinson, Dixie Drive-In Theatres Ct., Atlanta 3. (M8-C500-D7)

Greensboro, N. C. SOUTH DR., P.O. Box 732. Exec: Harris Robinson, Dixie Drive-In Thea. Ct., Atlanta 3. (M8-C300-D7)

Greenville, N. C. OPEN AIR, Hwy. 11. Exec: Byron Adams. (M7-C300-D7)

Guilford, N. C. PIEDMONT DR. Exec: M. A. Welch. (M8-C150-D6)

Henderson, N. C. DRIVE IN, Hwy. 1. Exec: Roy Turner and Bill Gregory. (M7-C350-D6)

Henderson, N. C. MOON-GLO DR. Exec: Ben Strozier. (M8-C200-D7)

Hendersonville, N. C. DRIVE IN. Exec: Ben Pless. (M8-C200-D7)

Hickory, N. C. DRIVE IN, Hwy. 64. Exec: J. P. Mull. (M8-C200-D7)

Hickory, N. C. SPRINGS ROAD DR. Exec: Ben Pless. (M8-C200-D7)

High Point, N. C. NORTH SIDE DR. Exec: W. E. Thrush. (M12-C200-D7)

Hudson, N. C. DRUMS DR., Hwy. 321. Exec: R. D. Drum. (M8-C150-D6)

Jacksonville, N. C. DRIVE IN, Hwy. 17. Exec: N. J. Kellum. (M7-C150-D7)

Kannapolis, N. C. PARK IN. Exec: H. H. Everett, Everett Enterprises Ct., Charlotte. (M8-C450-D7)

King, N. C. DRIVE IN. Exec: D. E. Gwynn. (M7-C190-D6)

Kinston, N. C. DRIVE IN, Hwy. 70. Exec: E. S. Holland. (M7-C150-D7)

Landis, N. C. PLAZA DR. Exec: R. C. Saunders. (M8-C200-D6)

Laurel Hill, N. C. AUTO DR., Hwy. 74. Exec: H. L. Britt. (M8-C200-D7)

Laurinburg, N. C. PARK IN, Hwy. 74. Exec: H. L. Britt. (M8-C150-D6)

Leaksville, N. C. EDEN DR. Exec: D. E. Gwynn. (M8-C200-D7)

Lexington, N. C. LEXINGTON DR., Rt. 5. RFD #5. Exec: Southeastern Theatres. (M8-C175-D7)

Liberty, N. C. LIBERTY DR., Hwy. 49. Exec: Holder and Stanley. (M8-C250-D6)

Lillington, N. C. CRUISE IN TH., Hwy. 421. Exec: A. J. Collins. (M7-C170-D6)

Lincolnton, N. C. FRIENDLY DR., Hwy. 321. Exec: Ben Nation and F. B. Grigg. (M8-C200-D6)

Lincolnton, N. C. ROSELAND DR., Hwy. 27. Exec: Wray Chapman. (M8-C250-D6)

Lincolnton, N. C. STARLIGHT DR., Hwy. 321. Exec: A. E. Miller. (M8-C391-D7)

Lenoir, N. C. DRIVE IN. Exec: W. P. Clark. (M8-C150-D7)

Louisburg, N. C. DRIVE IN. Exec: Glenn Davis. (M8-C250-D7)

Lumberton, N. C. DRIVE-IN, Hwy. 74. Exec: H. L. Bailey. (M7-C150-D6)

Madison, N. C. DRIVE IN, Hwy. 220. Exec: J. T. Baker. (M8-C175-D6)

Merry Hill, N. C. MIDWAY DR., Hwy. 45. Exec: V. D. Perry. (M7-C196-D7)

Mocksville, N. C. DAVIE DR. Exec: N. S. Chaffin. (M8-C175-D7)

Monroe, N. C. MOONLIGHT DR., Hwy. 74. Exec: Clifford Faw. (M8-C150-D7)

Mooresville, N. C. MOORESVILLE-DAVIDSON DR., Hwy. 21. Exec: W. C. Kiser. (M8-C200-D6)

Morganton, N. C. SKYLINE DR., Hwy. 64. Exec: Jos. J. Accurdi and Spake. (M8-C250-D6)

Mount Airy, N. C. DRIVE IN, Hwy. 52. Exec: L. C. Davis. (M8-C150-D6)

Murfreesboro, N. C. MURFREE DR. Exec: L. S. Lee (closed). (M7-C150-D6)

Nashville, N. C. WHITE'S DR. Exec: E. A. White. (M8-C200-D7)

New Bern, N. C. DRIVE IN, Hwy. 70. Exec: L. Gillett. (M8-C150-D7)

N. Wilkesboro, N. C. NORTH WILKESBORO DR., Hwy. 16, Rt. 1. Exec: R. B. Adams. (M8-C150-D6)

Newton Grove, N. C. DRIVE IN. Exec: C. Felton Godwin (closed). (M7-C200-D6)

Old Fort, N. C. GARDEN CITY DR. Exec: W. C. Macon. (M8-C150-D6)

Oxford, N. C. SKYLINE DR., Henderson Rd. Exec: R. Currin. (M8-C200-D6)

Pink Hill, N. C. MOTOR PARK TH., Hwy. 11. Exec: C. B. Hayworth. (M7-C160-D6)

Raeford, N. C. DRIVE IN, Hwy. 20. Exec: Billy Faulk. (M7-C200-D6)

Raleigh, N. C. FOREST DR. Exec: Consolidated Ct., P.O. Box 2446, Charlotte. (M12-C425-D7)

Raleigh, N. C. TOWER DR. Exec: Wilby-Kincey Ct., Charlotte. (M12-C400-D7)

Reidsville, N. C. MIDWAY DR. Exec: W. H. Hendrix. (M12-C300-D7)

Red Springs, N. C. RED SPRINGS DR., P.O. Box 391. Exec: Horton and Carl McIlwain. (M8-C200-D7)

Robbins, N. C. DRIVE IN. Exec: G. L. Faw. (M8-C175-D7)

Rockingham, N. C. ROCK-HAM DR. Exec: Lewis A. Whitley. (M8-C200-D7)

Rockingham, N. C. SKY-VU DR., Hwy. 74. Exec: J. M. Kime. (M7-C200-D6)

Rocky Mount, N. C. DRIVE IN, Hwy. 64. Exec: Vernon Holder. (M7-C150-D7)

Rocky Mount, N. C. TOWER DR. Exec: Wilby-Kincey Ct., Charlotte. (M7-C350-D7)

Roxboro, N. C. CAROLINA DR. Exec: R. M. O'Briant. (M7-C200-D7)

Salisbury, N. C. HITCHING POST DR. Exec: J. W. Mitchell. (M8-C200-D7)

Salisbury, N. C. SALISBURY DR., Hwy. 29. Exec: J. W. Martin and S. L. Pinkston. (M8-C200-D7)

Sanford, N. C. DRIVE IN, Hwy. 1. Exec: H. J. Chapman. (M7-C300-D7)

TALE OF A DRIVE-IN: Construction of the Hollywood on Highway 50, SANDOVAL, ILL., was started during winter weather when the structural members needed to be carried by hand because of mud. Its owners persisted through the indicated steps to the modern theatre at bottom.

Shelby, N. C. CLEVELAND DR., Hwy. 74. Exec: Paul Reynolds. (M8-C150-D6)

Shelby, N. C. SHELBY DR., Hwy. 18. Exec: C. V. Queen. (M8-C250-D6)

Siler City, N. C. DRIVE IN. Exec: Mrs. Runa Greenleaf. (M8-C200-D7)

Skyland, N. C. DRIVE IN, Hwy. 25. Exec: C. K. Carlyle. (M8-C150-D6)

Smithfield, N. C. DRIVE IN, Hwy. 301. Exec: H. P. Howell. (M7-C190-D6)

Southern Pines, N. C. STARVIEW DR., Hwy. 1. Exec: Dave Williamson. (M7-C200-D7)

Statesville, N. C. DRIVE IN. Exec: J. W. Hill. (M8-C200-D6)

Statesville, N. C. VILLA HEIGHTS DR., Hwy. 21. Exec: C. L. Cline. (M8-C225-D6)

Sylva, N. C. DRIVE IN. Exec: E. Y. Neill. (M12-C200-D7)

Tabor City, N. C. DRIVE IN, Hwy. 701. Exec: G. N. Gore. (M7-C175-D6)

Tarboro, N. C. V DR. Exec: C. A. Dandelake. (M7-C250-D6)

Taylorsville, N. C. DRIVE IN. Exec: H. B. Fortner. (M8-C175-D6)

Thomasville, N. C. MIDWAY DR., Hwy. 29. Exec: Consolidated Ct., P.O. Box 2446, Charlotte. (M8-C476-D7)

Troy, N. C. DRIVE IN. Exec: G. L. Faw. (M12-C175-D7)

Turkey, N. C. DRIVE IN. Exec: D. D. Brown. (M7-C350-D6)

Wadesboro, N. C. ANSON COUNTY DR., Hwy. 74. Exec: J. F. Medley. (M8-C175-D6)

Wallace, N. C. DRIVE IN, Hwy. 117. Exec: W. E. Thrush. (M7-C200-D7)

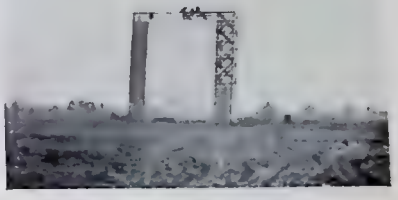
Waynesville, N. C. DRIVE IN. Exec: Clayton Mahaffey. (M7-C200-D7)

Walkertown, N. C. DRIVE IN. Exec: J. J. Booth. (M7-C175-D7)

Walnut Cove, N. C. DRIVE IN. Exec: George Hutchinson. (M8-C200-D7)











Washington, N. C. PARKVIEW DR., Hwy. 264. Exec: Thomas A. Batemen. (M7-C250-D7)

Weldon, N. C. STARLIGHT DR. Exec: A. P. Lassiter. (M8-C350-D7)

Whiteville, N. C. CAROLINA DR. Exec: W. E. Thrush (closed). (M*-C200-D*)

Whiteville, N. C. STARLIGHT DR., Hwy. 76. Exec: Marion Davis. (M7-C175-D7)

Wilmington, N. C. CAROLINA BEACH ROAD DR., Hwy. 42. Exec: W. E. Thrush. (M7-C200-D7)

Wilmington, N. C. WRIGHTSVILLE ROAD DR., Hwy. 74. Exec: Irwin Rourk. (M8-C190-D7)

Wilson, N. C. PINE VALLEY DR. Exec: Matthew Surnchi. (M8-C250-D7)

Wilson, N. C. STARLITE DR., Hwy. 117. Exec: Roy Champion. (M8-C250-D7)

Winston-Salem, N. C. FLAMINGO DR. Exec: Frank George. (M12-C500-D7)

Winston-Salem, N. C. SKYVIEW DR., Hwy. 421. Exec: Fred Sessoms. (M8-C300-D7)

Winston-Salem, N. C. WINSTON-SALEM DR., 516 W. 28th St. Exec: P. G. McGee. (M8-C300-D7)

South Carolina

Aiken, S. C. DRIVE IN, Hwy. 278. Exec: H. W. Hall. (M7-C150-D7)

Anderson, S. C. DRIVE IN, Rt. 29. Exec: Wilby-Kincey Ct., Charlotte, N. C. (M8-C300-D6)

Anderson, S. C. SKYWAY DR., Hwy. 178. Exec: P. C. Osteen. (M8-C372-D6)

Bamberg, S. C. BAMBERG DR., Hwy. 78. Exec: Wilbur Free. (M8-C100-D6)

Beaufort, S. C. DRIVE IN, Hwy. 21. Exec: H. O. Peoples. (M8-C200-D7)

Beaufort, S. C. GREENLAWN DR. Exec: D. S. Polk. (M8-C200-D7)

Bennettsville, S. C. BONDS AUTO DR., Hwy. 9. Exec: Walter H. Bonds. (M8-C175-D6)

Camden, S. C. MIDWAY DR., Hwy. 1. Exec: Charles Blythe. (M8-C175-D7)

Charleston, S. C. AZALEA DR. Exec: L. H. Ayers. (M8-C* -D7)

Charleston, S. C. N 52 DR. Exec: Consolidated Ct., P.O. Box 2446, Charlotte, N. C. (M12-C470-D7)

Chester, S. C. SKYLINE DR. Exec: H. H. Everett, Everett Enterprises, Charlotte, N. C. (M8-C200-D6)

Chester, S. C. CHESTER DR., P.O. Box 435. Exec: W. F. Campbell. (M8-C200-D6)

Cheraw, S. C. CHERAW DR. Exec: R. S. Rogers. (M8-C200-D7)

Cheraw, S. C. DRIVE IN. Exec: W. B. May. (M8-C200-D7)

Columbia, S. C. ALTA VISTA DR., Hwy. 1. Exec: J. M. Smith. (M8-C200-D7)

Columbia, S. C. DRIVE IN, Rt. 76. Exec: Wilby-Kincey Ct., Charlotte, N. C. (M8-C500-D7)

Columbia, S. C. HARLEM DR. Exec: Hugh M. Sykes (closed). (M*-C200-D*)

Columbia, S. C. NORTH 21 DR. Exec: T. G. Castles. (M8-C250-D7)

Columbia, S. C. SKYWAY DR. Exec: Exhibitor's Service. (M8-C500-D7)

Conway, S. C. DRIVE IN, Hwy. 503. Exec: H. V. Hewitt. (M8-C160-D6)

Crescent Beach, S. C. DRIVE IN, Hwy. 17. Exec: Walter Morgan. (M8-C300-D7)

Cowpens, S. C. CHERRY HILL DR. Exec: H. T. Chapman. (M8-C200-D6)

Dillon, S. C. DRIVE IN, Hwy. 301. Exec: W. S. Herring. (M8-C250-D6)

Ehrhardt, S. C. DRIVE IN, Hwy. 64. Exec: J. T. Greene. (M8-C150-D6)

Filbert, S. C. YORK-CLOVER DR. Exec: R. F. Pinson. (M8-C200-D7)

Florence, S. C. CIRCLE DR. Exec: Exhibitor's Service. (M8-C265-D7)

Florence, S. C. DRIVE IN, Hwy. 76. Exec: Ken Benson. (M8-C150-D7)

Gaffney, S. C. SKY-VUE DR. Exec: J. W. Griffin. (M12-C200-D7)

Georgetown, S. C. HIGHWAY 17 DR. Exec: M. L. Abrams. (M8-C150-D7)

Great Falls, S. C. DRIVE IN. Exec: L. E. Edwards. (M8-C200-D6)

Greenville, S. C. DRIVE IN, Hwy. 276. Exec: Wilby-Kincey Ct., Charlotte, N. C. (M12-C400-D6)

Greenville, S. C. SKYLAND DR., Buncombe Rd. Exec: Wilby-Kincey Ct., Charlotte, N. C. (M12-C600-D6)

Greenwood, S. C. DRIVE IN, Hwy. 22. Exec: A. T. Livingston. (M8-C250-D7)

Hampton, S. C. DRIVE IN. Exec: W. S. Shipes (closed). (M8-C150-D6)

Hartsville, S. C. DRIVE IN, Hwy. 151. Exec: Tony Jones. (M8-C150-D6)

Holly Hill, S. C. DRIVE IN, Hwy. 15. Exec: L. A. Ayers. (M8-C125-D7)

Inman, S. C. MOON GLOW DR. Exec: George Ward. (M8-C150-D6)

Kershaw, S. C. FOSTER'S DR. Exec: W. F. Truesdale. (M8-C250-D6)

Kingstree, S. C. DRIVE IN. Exec: I. C. Hatchell (closed). (M8-C150-D6)

Lancaster, S. C. MOTOR IN TH., Hwy. 93. Exec: A. J. Biggart. (M8-C150-D6)

Laurens, S. C. DRIVE IN, Hwy. 221. Exec: Jack Davis. (M12-C200-D6)

Marion, S. C. MARION DR., 911 Evans Rd., Hwy. 501. Exec: R. W. Pigg and A. H. Powell. (M8-C175-D6)

Mullins, S. C. MULLINS 76 DR. Exec: Howard Anderson. (M12-C200-D6)

Newberry, S. C. NEWBERRY DR., Hwy. 176. P.O. Box 132. Exec: Albert Roof and C. K. Brown. (M8-C200-D6)

Nichols, S. C. DRIVE IN. Exec: George L. Turner (closed). (M8-C150-D6)

Orangeburg, S. C. BON AIR DR., Hwy. 42. Exec: B. F. Watkins. (M8-C150-D7)

Orangeburg, S. C. ORANGEBURG DR., Hwy. 210. Exec: Mrs. Florence Tarlton. (M8-C150-D7)

Piedmont, S. C. OAK-VALE DR., Hwy. 29. Exec: Jimmy Gable. (M8-C400-D7)

Rock Hill, S. C. FORT ROC DR., Hwy. 21. Exec: Bob Jeffries. (M8-C300-D6)

Saint Andrews, S. C. DRIVE IN. Exec: L. H. Ayers. (M8-C200-D6)

Seneca, S. C. DRIVE IN, Hwy. 28. Exec: Morris Land. (M8-C175-D6)

Spartanburg, S. C. DRIVE IN, Hwy. 29. Exec: B. C. Williams. (M12-C375-D7)

Spartanburg, S. C. SPARTANBURG DR., Box 1222. Exec: B. C. Williams. (M8-C100-D6)

Spartanburg, S. C. STARLITE DR. Exec: Marvin Pless. (M8-C250-D6)

Summerville, S. C. DRIVE IN, Hwy. 64. Exec: L. H. Ayers. (M8-C200-D7)

Sumter, S. C. DRIVE IN, Hwy. 521. Exec: Curtis Tarlton. (M8-C150-D7)

Sumter, S. C. SUNSET DR. Exec: F. C. Hatchell. (M12-C200-D7)

Union, S. C. DRIVE IN, Hwy. 92. Exec: J. O. Corn and W. H. McColl. (M8-C225-D6)

Walhalla, S. C. MOUNTAIN VIEW DR. Exec: Ben Pless. (M7-C250-D6)

Walterboro, S. C. DRIVE IN, Hwy. 17. Exec: E. B. Funderburk. (M12-C150-D7)

Ware Shoals, S. C. HONEY WARE DR. Exec: M. L. Street. (M8-C175-D7)

CHICAGO TERRITORY

Illinois

Aurora, Ill. AURORA DR., Rt. 31, Exposition Park. Exec: Orville Fox and J. La Plante. (M7-C300-D7)

Aurora, Ill. HI-LITE DR., Rt. 30. Exec: Walter J. Stobach. (M7-C650-D7)

Bloomington, Ill. PHIL KRON DR. Exec: J. G. Keelen. (M6-C800-D7)

Champaign, Ill. TWIN CITY DR. Exec: J. W. Barr. (M7-C900-D7)

Chicago, Ill. DRIVE IN, 4101 Harlem Ave. Exec: Essaness Theatres Ct. (M7-C1100-D7)

Chicago, Ill. NORTH AVE. DR. Exec: Essaness Theatres Ct. (M7-C1300-D7)

Chicago, Ill. STARLIGHT DR., 95th and Ridgeland. Exec: James Kilgallen. (M7-C1150-D7)

Chicago, Ill. TWIN OPEN AIR TH., 87 St. and Cicero. Exec: N. S. Barger, Barger and Hunt. (M7-C1700-D7)

Danville, Ill. DIXIE DR. Exec: Alliance Theatre Ct., Chicago 4. (M7-C506-D7)

Danville, Ill. SKY WAY DR. Exec: Jack Butler. (M7-C750-D7)

Decatur, Ill. DECATUR DR., 2500 N. Jasper St. Exec: George Kerasotes, Springfield, Ill. (M6-C953-D7)

Dekalb, Ill. DE-VAL DR., Hwy. 53. Exec: Valos Ct. (M7-C500-D7)

Elgin, Ill. STAR VIEW DR. Exec: John H. Reckus (closed). (M7-C550-D7)

Elmhurst, Ill. SKY-HI DR., Roosevelt and Butterfield Rds. Exec: Louis Jelinek. (M6-C500-D7)

Galesburg, Ill. GALESBURG DR. Exec: Christissen and Tracy. (M7-C600-D7)

Grayslake, Ill. FAMILY OUTDOOR TH., Rts. 85 and 120. Exec: Held and Nelson. (M7-C1040-D7)

Joliet, Ill. BEL-AIR DR. Exec: T. I. Wagner, 1217 Taylor St. (M7-C* -D7)

Joliet, Ill. HILLTOP DR. Exec: Rube Levine. (M7-C* -D7)

Kankakee, Ill. 54 DR., Rt. 54, Fair and Greenwood Sts. Exec: Rube Levine. (M7-C500-D7)

La Grange, Ill. SIXTY-SIX DR., Rt. 45, Joliet and La Grange Rds. Exec: Phil Smith Ct., Boston, Mass. (M6-C1000-D7)

La Salle, Ill. DRIVE IN, Rt. 6. Exec: Alliance Theatres Ct., Chicago 4. (M7-C475-D7)

Morris, Ill. CIRCLE DR. Exec: Anderson Theatres Ct. (UNC). (M7-C500-D7)

Morton Grove, Ill. MORTON GROVE DR., 9500 N. Waukegan Rd. Exec: N. S. Barger, Barger and Hunt. (M6-C1000-D7)

Norris, Ill. HILLCREST DR. Exec: Norris Theatre Co. (M7-C* -D7)

Ottawa, Ill. DRIVE IN. Exec: Alliance Theatres Ct., Chicago 4. (M7-C475-D7)

Peoria, Ill. BELLEVUE DR., Rt. 116. Exec: Abner Klein. (M7-C700-D7)

Peoria, Ill. PEORIA DR., Glen Ave. Exec: Ralph Lawler. (M6-C631-D7)

Pontiac, Ill. PONTIAC DR. Exec: Kenneth Murray. (M7-C* -D7)

River Grove, Ill. NORTH AVENUE DR., River Rd. nr. North Ave. Exec: Essaness Theatres Ct. (M8-C1000-D7)

Rockford, Ill. RIVERLANE OUTDOOR TH., Rt. 173, P.O. Box 866. Exec: M. Schweitzer. (M7-C690-D7)

Streator, Ill. STREATOR DR. Exec: J. Hill. (M7-C* -D7)

Waukegan, Ill. OUTDOOR TH., Rt. 41 and Washington St. Exec: F. Ryan. (M7-C1250-D7)

Indiana

Dunlap, Ind. MIDWAY DR. Exec: S. B. Greiver, 1235 So. Wabash Ave., Chicago, Ill. (M7-C600-D7)

Griffith, Ind. GRIFFITH DR., Ridge Rd. and Cline Ave. Exec: Phil Smith Ct., Boston, Mass. (M6-C650-D7)

Hammond, Ind. HAMMOND 41 OUTDOOR, Rt. 41. Exec: Manta and Rose Ct. (M7-C1000-D7)

Hammond, Ind. MOON LITE DR., 5th and Cline Sts. Exec: Peter McKeone and Jos. Finerty. (M7-C1000-D7)

Michigan City, Ind. 212 OUTDOOR, Rts. 12 and 20. Exec: Manta and Rose Ct. (M7-C600-D7)

Osceola, Ind. STARLITE DR., Rt. 20. Exec: Louis Cochovety. (M6-C500-D7)

South Bend, Ind. SOUTH BEND AUTO TH., Rt. 2. Exec: A. Ochs. (M6-C650-D7)

CINCINNATI TERRITORY

Kentucky

Cliff, Ky. PRESTONBURG DR. Exec: George P. Hereford, Prestonburg, Ky. (M8-C320-D7)

Covington, Ky. DIXIE GARDENS DR. Exec: Willis Vance. (M8-C700-D7)

Dayton, Ky. RIVERVIEW DR. Exec: R. Bressler. (M8-C400-D7)

Danville, Ky. STARLITE DR. Exec: Joe Marshall. (M8-C450-D7)

Florence, Ky. FLORENCE DR. Exec: George Hill. (M8-C625-D7)

Frankfort, Ky. STARWAY DR. Exec: Sledge, Theatre Owners Corp., Cincinnati. (M8-C400-D7)

Franklin, Ky. FRANKLIN DR. Exec: Garland C. Jones. (M8-C300-D7)

Georgetown, Ky. BLUE GRASS DR., Rt. 25. Exec: Mark Cummins. (M8-C400-D7)

Hazard, Ky. GRANDVIEW DR. Exec: A. Edw. Campbell. (M7-C300-D7)

Irvine, Ky. PALMER DR. Exec: J. T. Palmer (closed). (M8-C200-D7)

Latonia, Ky. KENTUCKY DR. Exec: Theatre Owners Corp., Cincinnati. (M8-C400-D7)

Nicholasville, Ky. LEXINGTON DR., R.R. 1. Exec: Johnson Enterprises. (M7-C500-D7)

Pikeville, Ky. DRIVE IN. Exec: Jerome Bressler. (M8-C485-D7)

Prestonburg, Ky. PRESTONBURG DR. Exec: Woodie Bressler. (M8-C400-D7)

Whitesburg, Ky. ELINDA ANN DR. Exec: Art V. Phillips. (M8-C300-D7)

Winchester, Ky. SKYVIEW DR. Exec: Raymond Toepfer. (M7-C450-D7)

Ohio

Aberdeen, O. RIVERSIDE DR. Exec: A. Edw. Campbell. (M8-C400-D7)

Allenburg, O. ROSELAWN AUTO TH. Exec: J. Henry Davidson, Associated Theatres Ct., Lynchburg, O. (M8-C400-D7)

Athens, O. VALLEY DR. Exec: R. Shor. (M7-C400-D7)

Belpre, O. BELPRE OPEN AIR TH., P.O. Box 241. Exec: Fred Helwig and Fred Clemens. (M8-750-D7)

Bridgeville, O. OLD TRAIL DR. Exec: Roy Waller, Roy Theatre, New Concord. (M8-C100-D7)

Burlington, O. AUTO DR. Exec: F. Allara. (M8-C400-D7)

Byesville, O. C & B DR. Exec: George Brown. (M7-C288-D7)

Cambridge, O. CAMBRIDGE CRUISE IN. Exec: F. Francis, Jr. (M8-C350-D7)

Cassello, O. STARLIGHT DR. Exec: John Hollokan, 50 Bell St., Dayton 3. (M8-C250-D7)

Celina, O. ST. MARY'S DR. Exec: Chakeres Ct., Springfield, O. (M8-C500-D7)

Celina, O. STARLIGHT DR. Exec: Feltz Bros. (UNC). (M8-C* -D7)

Chillicothe, O. MOONLIGHT AUTO TH., E. Main St. Exec: L. Wetzel. (M8-C460-D7)

Cincinnati, O. AUTO-IN, 500 Rosemont Ave., Cincinnati 5, O. Exec: Jerome J. Kunz. (M8-C400-D7)

Cincinnati, O. TWIN DR. Exec: Rube Shor. (M8-C700-D7)

Circleville, O. STARLITE CRUISE IN. Exec: H. E. Bennett. (M8-C300-D7)

Columbus, O. AIRPARK DR., 2244 Morse Rd. Exec: Edmund Dorgan (closed). (M*-C* -D*)

Columbus, O. CCC AUTO TH., 1395 Harrisburg Pike. Exec: F. Yassenoff and Harold Schwartz. (M7-C400-D7)

Columbus, O. EASTSIDE AUTO TH., 3811 E. Main St. Exec: F. Yassenoff and H. Schwartz. (M7-C400-D7)

Columbus, O. MILES EAST MAIN DR., 5000 E. Main St. Exec: Mrs. Ethel Miles. (M8-C700-D7)

Columbus, O. MILES SCIOTO DR., 3050 Riverside Dr. Exec: Mrs. Ethel Miles. (M7-C500-D7)

Columbus, O. MILES WEST BROAD DR., 4050 Broad St. Exec: Mrs. Ethel Miles. (M7-C500-D7)

Columbus, O. NATIONAL AUTO TH., 3750 W. Broad. Exec: F. Yassenoff. (M8-C550-D7)

Columbus, O. RIVERSIDE DR. Exec: F. Yassenoff. (M8-C200-D7)

Dayton, O. BELMONT AUTO IN TH., P.O. RR 2. Exec: Max Milbauer. (M8-C500-D7)

Dayton, O. DAYTON DR., Valley Pike. Exec: W. Bressler. (M8-C500-D7)

Dayton, O. MIAMI DR., 6500 W. 3rd St. Exec: Ben Wachnansy. (M8-C500-D7)

Dayton, O. SALEM DR., 3815 Salem Ave. Exec: Robert Cupp and Paul Swinger. (M8-C400-D7)

Dayton, O. SHERWOOD DR., 5405 W. 3rd St. Exec: Sam and Allen Levin. (M8-C500-D7)

Dayton, O. SKYLINE AUTO, Rt. 25. Exec: L. Wetzel. (M8-C650-D7)

Dayton, O. VALLEY DR., 2700 Valley Pike. Exec: R. Wachnansy. (M8-C500-D7)

Dent, O. DENT AUTO DR. Exec: Jerome J. Kunz. (M7-C300-D7)

Dublin, O. RIVERSIDE AUTO TH. Exec: F. Yassenoff and Harold Schwartz. (M7-C400-D7)

Eaton, O. CRUISE-IN TH. Exec: L. Clemmer. (M8-C400-D7)

Excello, O. DIXIE DR. Exec: R. Shor. (M7-C500-D7)

Forestville, O. FOREST AUTO TH. Exec: Marcus Enterprises Ct., Indianapolis, Ind. (M7-C600-D7)

Frederick, O. DRIVE IN, Miller's Grove. Exec: William Miller, P.O. RFD 6, West Milton. (M8-C350-D7)

Greenville, O. SPEEDWAY AUTO TH. Exec: Fred Krimm. (M8-C500-D7)

Hamilton, O. HAMILTON AUTO TH. Exec: L. E. Olt. (M7-C400-D7)

Hamilton, O. STOCKTON OUTDOOR AUTO TH. Exec: M. S. Cummins. (M7-C300-D7)

Jackson, O. GROVE AUTO DR. Exec: Henry Stagmiller. (M8-C250-D7)

Lancaster, O. SKYVIEW CRUISE IN, East Main Pike. Exec: Carlos Crumm and E. Pullium. (M8-C400-D7)

Lawrenceville, O. DRIVE IN. Exec: (*) (closed). (M*-C* -D*)

Lebanon, O. OLD FORT AUTO TH. Exec: J. Henry Davidson, Associated Theatres Ct., Lynchburg, O. (M7-C314-D7)

Lucasville, O. SCIOTO BREEZE AUTO TH. Exec: Harry Riddle. (M8-C350-D7)

Marietta, O. STARLITE DR. Exec: J. B. Stedman. (M8-C350-D7)

Miamisburg, O. CRUISE IN. Exec: L. Clemmer. (M7-C400-D7)

Milford, O. MO-TOUR DR. Exec: Milford Amuse. Co., Werne Williams. (M8-C600-D7)

Montgomery, O. DRIVE IN, Montgomery Rd. Exec: Phil Smith Ct., Boston, Mass. (M8-C684-D7)

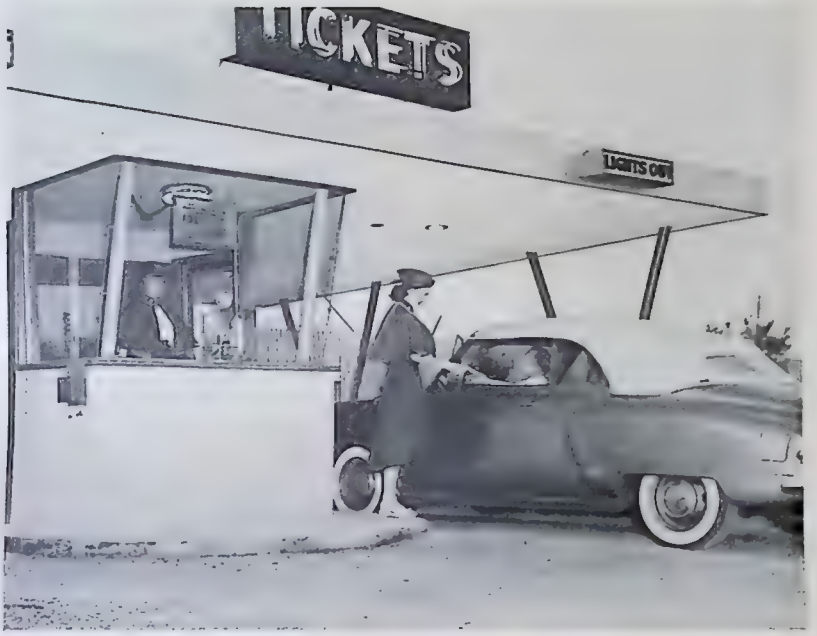
Moulton, O. SUNSET CRUISE-IN. Exec: Milton G. Presar, Wapakoneta. (M8-C350-D7)

Mount Healthy (Cincinnati), O. MOUNT HEALTHY DR. Exec: L. Wetzel. (M8-C575-D7)

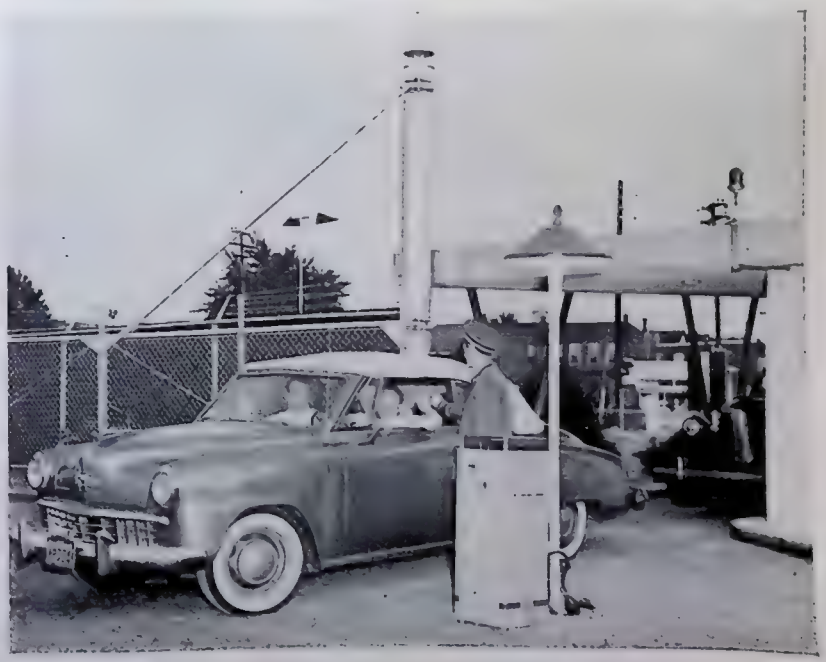
Mount Holly, O. STARLITE DR. Exec: Jerome Jackson, Happy Hour Theatre, Williamsburg. (M8-C350-D7)

Newark, O. VALLEY DR., P.O. Box 592. Exec: Floyd Price. (M8-C500-D7)

New Chicago, O. SUNSET CRUISE DR., Germantown Rd., R.F.D. 6, Dayton. Exec: L. Wetzel. (M7-C300-D7)



CASH CONTROL IS EASY with proper equipment and personnel. At the CHESTER PIKE, EDDYSTONE, PA., uniformed cashiers sell the proper number of tickets which are later collected by the usual "doorman" who inserts half in the Automaticket "Stub Rod" box for spot checking by management.



New Concord, O. OLD TRAIL DR. Exec: Roy Waller. (M8-C350-D7)

Piqua, O. PIQUA DR. Exec: Paul Swinger. (M8-C450-D7)

Portsmouth, O. DRIVE IN. Exec: Barton Cook and Payne (closed). (M°-C° -D°)

Roseville, O. STARLIT DR. Exec: D. Law. (M8-C300-D7)

Saint Henry, O. STARLITE AUTO DR. Exec: Feltz Bros. (M8-C350-D7)

Saint Marys, O. DRIVE IN. Exec: Chakeres Ct., Springfield, O. (M7-C400-D7)

Sidney, O. SIDNEY DR. Exec: Howard Gall. (M8-C350-D7)

Six Mile Turn (Zanesville, P.O.), O. STARLET DR. Exec: Dorman Law (closed). (M7-C250-D7)

South Zanesville, O. SKYWAY DR. Exec: Roy Waller. (M8-C450-D7)

Springfield, O. STAR DUST DR. Exec: Sam Levin. (M6-C400-D7)

Springfield, O. MELODY CRUISE-IN TH. Exec: Ray Stout. (M8-C400-D7)

Springfield, O. SKYWAY DR. Exec: L. Wetzel. (M8-C500-D7)

Stockton (Hamilton, P.O.), O. ACME AUTO TH. Exec: Mark Cummins. (M8-C400-D7)

Troy, O. DIXIE TROY DR. Exec: Moe and Elizabeth Potasky. (M8-C375-D7)

Wapakoneta, O. SUNSET CRUISE IN. Exec: Milton G. Presar. (M8-C200-D7)

Washington Court House, O. CCC AUTO TH. Exec: J. Henry Davidson, Associnted Theatres Ct., Lynchburg, Ohio. (M8-C400-D7)

Wellston, O. DRIVE IN. Rt. 75. Exec: Frank Rauch, Jr., and Frank Nolan. (M8-C600-D7)

Wheelersburg, O. DRIVE IN. Exec: Herb Ochs. (M7-C500-D7)

Wilmington, O. DRIVE IN. Exec: Chakeres Ct., Springfield, O. (M6-C500-D7)

Woodlawn, O. WOODLAWN DR. Exec: Nat Kaplan. (M8-C550-D7)

Xenia, O. XENIA AUTO INN. Exec: Dean Dennis. (M8-C400-D7)

Zanesville, O. MAPLE AUTO DR. Exec: H. M. Fiala. (M7-C880-D7)

Zanesville, O. OLD TRAIL DR. Exec: Ray Waller. (M7-C160-D7)

West Virginia

Beckley, W. Va. BECKLEY OPEN AIR TH. Exec: F. Clemens. (M8-C450-D7)

Beckley, W. Va. CRAB ORCHARD DR., P.O. RFD Harvey. Exec: E. R. Harvey. (M7-C350-D7)

Bell, W. Va. TRAIL DR. Exec: E. R. Custer. (M8-C500-D7)

Bluefield, W. Va. SKYWAY DR. Exec: Earl Payne. (M8-C600-D7)

Ceredo, W. Va. CEREDO DR. Exec: Abe Hyman. (M7-C500-D7)

Craigsville, W. Va. INDOOR-OUTDOOR. Exec: Arden A. Richards. (M8-C100-D7)

Glen Jean, W. Va. MOUNTAIN AIR DR. Exec: E. J. Buffa. (M8-C350-D7)

Lewisburg, W. Va. WALNUT HILLS DR., Rt. 219. Exec: D. Weekley. (M7-C400-D7)

Logan, W. Va. MONITOR DR. Exec: F. Clemens. (M8-C350-D7)

Man, W. Va. MAN DR. Exec: A. W. Cook. (M8-C200-D7)

Mason City, W. Va. MASON CITY DR. Exec: Ross Filson. (M7-C500-D7)

Mount Hope, W. Va. MOUNTAINAIR DR. Exec: E. J. Buffa. (M8-C350-D7)

Nettie, W. Va. DRIVE IN. Exec: C. L. McClung. (M8-C275-D7)

Princeton, W. Va. DRIVE IN. Exec. A. R. Belcher. (M8-C275-D7)

Rand, W. Va. TRAIL DR. Exec: R. Shor. (M8-C650-D7)

Rupert, W. Va. SUNSET DR. Exec: R. A. Callison. (M7-C290-D7)

Saint Albans, W. Va. VALLEY DR. Exec: R. Shor. (M7-C500-D7)

Vienna, W. Va. MUR DR. Exec: L. Wetzel. (M7-C316-D7)

CLEVELAND TERRITORY

Ohio

Akron, O. STARLIGHT DR., Hwy. 224. Exec: George A. Blake. (M6-C350-D7)

Alliance, O. PARK AUTO TH., Hwy. 62. Exec: S. Barck. (M6-C430-D7)

Andover, O. SHANE'S DR., Hwy. 7. Exec: V. McCrone. (M8-C350-D7)

Arlington, O. AMANDA AUTO TH., Hwy. 37. Exec: R. Dyer, P.O. R.R. #1, Box 74B. (M8-C250-D7)

Ashtabula, O. ASHTABULA SKYWAY DR., Hwy. 20. Exec: R. H. Manley. (M7-C300-D7)

Barberton, O. VALLEY AUTO TH., Hwy. 21. Exec: Vincent Lauter. (M6-C200-D7)

Bellfontaine, O. DRIVE IN, Hwy. 68. Exec: Dale Elleman. (M8-C300-D7)

Blaine, O. SUPER 40 DR., Hwy. 40. Exec: C. G. Velus. (M8-C200-D7)

Bucyrus, O. TRI CITY DR., Hwys. 30 and 598. Exec: D. P. Jacobs. (M8-C375-D7)

Cleveland, O. CLEVELAND AUTO DR., 11211 Brookpark Rd. Exec: Sam Haas. (M6-C700-D7)

Cleveland, O. EAST SIDE DR., Hwy. 8. Exec: Phil Smith Ct., Boston, Mass. (M8-C600-D7)

Cleveland, O. WEST SIDE DR., Hwy. 17. Exec: Phil Smith Ct., Boston, Mass. (M8-C600-D7)

Copley, O. MONTROSE DR., Medina-Akron Rd. Exec: Lawrence Tyrell, 185 Avondale Dr., Akron. (M8-C500-D7)

Coshocton, O. SKYWAY DR. Exec: F. Gilfilen. (M7-C225-D7)

Creston, O. CRESTON AUTO TH., Hwy. 3. Exec: M. R. Martin, 950 Delia Ave., Akron, O. (M6-C200-D7)

Cuyahoga Falls, O. ASCOT DR., Hwy. 8. Exec: Clarence Snook and George A. Blake. (M6-C400-D7)

Defiance, O. DEFIANCE DR., Hwy. 66, P.O. R.R. 2. Exec: William Logan. (M6-C200-D7)

Delaware, O. KINGMAN DR., Hwy. 23, P.O. 111. Exec: George Kaler. (M6-C275-D7)

Delphos, O. STAUP AUTO TH., Hwy. 30. Exec: Paul Staup, 235 N. Pierce St. (M6-C300-D7)

Elyria, O. CARLISLE DR., Hwy. 20. Exec: John Tender. (M8-C400-D7)

East Liverpool, O. SKY VIEW DR., Hwy. 170. Exec: Lawrence Black. (M6-C250-D7)

Fairview, O. FAIRVIEW DR., Hwy. 20. Exec: Horace Abrams. (M6-C700-D7)

Findlay, O. FINDLAY DR., Hwy. 12. Exec: J. Knight, 509 E. Main St., Columbus. (M8-C325-D7)

Fostoria (Alvada, P.O.), O. STARLITE DR., Hwy. 224. Exec: Virgil Pfau. (M6-C200-D7)

Fremont, O. FREMONT DR., Hwy. 20. Exec: Mosser Bros. (M7-C300-D7)

Goshen Township (New Philadelphia, P.O.), O. TWILIGHT DR., Hwy. 250. Exec: A. K. Veach. (M6-C225-D7)

Harrisburg, O. MID CITY DR., Hwy. 62. Exec: Jerry Reinhart. (M6-C635-D7)

Kenton, O. HI ROAD DR., Hwy. 68. Exec: Bob Hipp. (M8-C325-D7)

Lima, O. LIMA DR., Hwy. 25. Exec: H. Shock. (M6-C300-D7)

Lima, O. GLORIA DR., Hwy. 25. Exec: H. Shock. (M6-C300-D7)

Lorain, O. LORAIN DR., Hwy. 2. Exec: Wilbur and A. E. Ptak. (M6-C350-D7)

Madison, O. SKYWAY DR., Hwy. 20. Exec: R. H. Manley. (M6-C300-D7)

Mansfield, O. GALION DR., Hwy. 42. Exec: Harold Nussbaum. (M6-C325-D7)

Mansfield, O. MIDWAY AUTO, Hwy. 42. Exec: Al Ochs. (M6-C350-D7)

Marion, O. MARION DR., Hwy. 23. Exec: Horace Abrams. (M6-C300-D7)

Massillon, O. STARK DR., 2416 Lincolnway E. Exec: Skirball Bros. Ct., Cleveland. (M6-C600-D7)

Maumee, O. MAUMEE DR., Hwy. 20. Exec: Paul Wintner. (M6-C800-D7)

Mentor, O. MENTOR DR., Hwy. 20. Exec: Shulman and Schwartz. (M6-C400-D7)

Millbury, O. WOODVILLE DR., Hwy. 120. Exec: F. F. Pavlica. (M8-C350-D7)

Morristown, O. MORRISTOWN DR., Hwy. 40. Exec: H. Mendelson, Cadiz Dept. Store, Cadiz, O. (M8-C325-D7)

Mt. Vernon, O. KNOX AUTO TH., Hwy. 13. Exec: R. Sturgis. (M6-C300-D7)

Newcomerstown, O. STAR LITE DR., Hwy. 36. Exec: Manos Amusement, Toronto, O. (M8-C300-D7)

Niles, O. LA VERNE DR., Hwy. 422. Exec: C. D. Clark, 172 Atlantic N.E., Warren, O. (M6-C250-D7)

North Canton, O. AUTOMOBILE TH., Hwy. 8. Exec: Associated Th. Ct. (M6-C250-D7)

North Kingsville, O. MIDWAY AUTO TH. Exec: Foster Hathaway, Ritz Th., Struthers, O. (M7-C300-D7)

Norwalk, O. SKY VIEW DR., Hwy. 20. Exec: Lou Ratener and Tony Stern, 500 Film Bldg., Cleveland, O. (M8-C425-D7)

Portage, O. SKY LITE DR., Hwy. 25. Exec: Carl H. Schwyn. (M7-C500-D7)

Rayland, O. DRIVE IN, Hwy. 7. Exec: Herb Ochs. (M6-C600-D7)

Rittman, O. SUNSET AUTO TH. Exec: Ernest Plitz. (M6-C250-D7)

Russell's Point, O. EAST LAKE DR. Exec: Jack Gutilla, P. O. Box 507, Indian Lake, O. (M6-C350-D7)

St. Clairsville, O. SHIA'S DR., Hwy. 40. Exec: S. D. Shia. (M8-C400-D7)

Sandusky, O. SANDUSKY DR., Hwy. 2. Exec: Earl Seitz. (M7-C500-D7)

Sawyerwood, O. GALA DR., Hwy. 224. Exec: Jas. Ramicone, P. O. Box 239, East Akron, O. (M8-C500-D7)

Steubenville, O. FAMILY DR., Hwy. 7. Exec: P. Wellman, Girard, O. (M6-C450-D7)

Steubenville, O. SUNSET AUTO TH., Hwys. 23 and 43. Exec: John Selby and R. Noltemeyer. (M6-C500-D7)

Strasburg, O. BOYERS AUTO TH., Hwy. 250. Exec: Roy McCombe and W. B. Franklin. (M6-C250-D7)

Tiffin, O. TIFFIN DR., Hwy. 53. Exec. Howard Schultz. (M8-C275-D7)

Toledo, O. PARKSIDE DR., Hwy. 2. Exec: J. Dempsey. (M8-C800-D7)

Toledo, O. TELEGRAPH DR., Hwy. 24. Exec: J. Dempsey. (M6-C400-D7)

Toledo, O. TOLEDO DR., Hwy. 223. Exec: B. Wachnansy. (M6-C700-D7)

Uniontown, O. BLUEBIRD AUTO TH., Hwy. 8. Exec: E. Ballou. (M6-C250-D2)

Wadsworth, O. BLUE SKY DR., Hwy. 224. Exec: John Selby. (M6-C200-D7)

Wickliffe, O. EUCLID AVE. OUTDOOR TH., Hwy. 20. Exec. Horace Abrams. (M8-C700-D7)

Wooster, O. SKYLINE AUTO TH., Hwy. 30. Exec: George Davis. (M6-C300-D7)

Youngstown, O. NORTHSIDE DR., Hwy. 90. Exec: P. Wellman, Girard, O. (M6-C500-D7)

Youngstown, O. SKY-HI DR., Hwy. 422. Exec: Foster Hathaway. (M6-C450-D7)

Youngstown, O. SOUTHSIDE DR. Hwy. 7. Exec: P. Wellman, Girard, O. (M6-C500-D7)

Youngstown, O. WESTSIDE DR., Hwy. 18. Exec: P. Wellman, Girard, O. (M6-C450-D7)

DALLAS TERRITORY

New Mexico

Albuquerque, N. M. CACTUS DR., Yale Ave. nr. Hwy. 66. Exec: Interstnte Th. Ct., Dallas, Tex. (M10-C674-D7)

Albuquerque, N. M. '66 DR. Exec: Interstate Th. Ct., Dallas, Tex. (M10-C400-D7)

Albuquerque, N. M. STAR DR. Exec: T. E. Ribble. (M10-C500-D7)

Albuquerque, N. M. TESEQUE DR. Exec: Claude Graves. (M10-C320-D7)

Carlsbad, N. M. FIESTA DR. Exec: Th. Enterprises, Inc. Ct., Dallas, Tex. (M9-C450-D7)

Clovis, N. M. YUCCA DR., Hwy. 70. Exec: Th. Enterprises, Inc. Ct., Dallas, Tex. (M9-C350-D7)

Hobbs, N. M. EAGLE DR. Exec: E. L. Williamson. (M9-C°-D7)

Hobbs, N. M. SKY VU DR. Exec: Th. Enterprises, Inc. Ct., Dallas, Tex. (M9-C400-D7)

Portales, N. M. VARSITY DR. Exec: Th. Enterprises, Inc. Ct., Dallas, Tex. (M12-C250-D7)

Roswell, N. M. STARLITE DR. Exec: Th. Enterprises, Inc. Ct., Dallas, Tex. (M9-C400-D7)

Oklahoma

Durant, Okla. SKY VUE DR. Exec: Robb & Rowley-United Ct., Dallas, Tex. (M12-C400-D7)

McAlester, Okla. HIWAY 274 DR. Exec: Robb & Rowley-United Ct., Dallas, Tex. (M12-C°-D7)

Muskogee, Okla. HI WAY 64 DR. Exec: O. F. Sullivan. (M9-C503-D7)

Muskogee, Okla. P & M DR. Exec: Robb & Rowley-United Ct., Dallas, Tex. (M9-C400-D7)

Texas

Abilene, Tex. ELMWOOD DR., Hwy. 158. Exec: R. N. Likens. (M8-C298-D7)



A TIDY INTERIOR is the never ending objective of good management. At the 638-car VARSITY, SAN ANTONIO, TEX., owners Mul-Den Enterprises keep everything shipshape. Modern Theatre Equipment of Dallas installed Motiograph speakers, projection and sound and Wagner letters.

Abilene, Tex. PARK DR. Exec: Interstate Th. Ct., Dallas. (M12-C475-D7)

Abilene, Tex. TOWER DR., Hwy. 8. Exec: O. M. Kirkeby. (M12-C350-D7)

Alice, Tex. BUCKHORN DR., Hwy. 44. Exec: H. C. Gunter. (M7-C300-D7)

Amarillo, Tex. PALO DURO DR., Hwy. 87. Exec. Harold V. Wilson. (M7-C350-D7)

Amarillo, Tex. SUNSET DR. Exec: W. O. Bearden. (M7-C400-D7)

Amarillo, Tex. TRAIL DR., Hwy. 66., P. O. Box 748. Exec: W. O. Bearden. (M7-C400-D7)

Argyle, Tex. COLONIAL DR., Hwy. 377. Exec: George Franklin. (M7-C350-D7)

Austin, Tex. CHIEF DR., 5000 Block George Rd. Exec. Ezell & Associates Ct., Dallas. (M12-C814-D7)

Austin, Tex. DRIVE IN. Exec. Ezell & Associates Ct., Dallas. (UNC) (M12-C*-D7)

Austin, Tex. JOESPH'S DR. Exec: Eddie Joseph. (M12-C200-D7)

Austin, Tex. MONTOPOLIS DR., Hwy. 71. Exec: Eddie Joseph. (M12-C600-D7)

Austin, Tex. NORTH AUSTIN DR., Hwy. 81. Exec: Eddie Joseph. (M12-C250-D7)

Austin, Tex. SOUTH AUSTIN DR., Hwy. 81. Exec: Eddie Joseph. (M12-C400-D7)

Ballinger, Tex. HILLCREST DR. Exec: Hodge Ct. (M12-C400-D7)

Ballinger, Tex. HORSESHOE DR. Exec: R. T. Hall. (M12-C300-D7)

Baytown, Tex. DECKER DR. Exec: Jefferson Amusement Co. Ct., Beaumont. (M12-C408-D7)

Beaumont, Tex. CIRCLE DR., Hwy. 90. Exec: Jefferson Amusement Co. Ct. (M12-C550-D7)

Beeville, Tex. BRONCO DR., P.O. Box 966. Exec: A. M. Gaines. (M12-C875-D7)

Big Spring, Tex. TERRACE DR., Hwy. 84. Exec: Robb and Rowley United Ct., Dallas. (M9-C350-D7)

Big Lake, Tex. REAGAN DR. Exec: O. M. Kirkeby. (M12-C300-D7)

Blackwell, Tex. RANEY DR. Exec: M. C. Raney. (M12-C100-D7)

Brady, Tex. SKYLITE DR., Hwy. 87. Exec: J. D. Goode (closed). (M9-C300-D7)

Breckenridge, Tex. BRECK DR. Exec: Lynn Bigler. (M12-C250-D7)

Breckenridge, Tex. CORRAL DR. Exec: Creach and Klatt. (M12-C275-D7)

Brenham, Tex. STARLITE DR. Exec: C. H. Schroeder. (M12-C200-D7)

Brownfield, Tex. HI HO DR., Hwy. 62. Exec: Mrs. Howze. (M12-C200-D7)

Brownsville, Tex. EL CHARRO DR., Boca Chica-Los Fresno Hwy. Exec: Ezell and Associates Ct., Dallas. (M12-C548-D7)

Brownsville, Tex. STAR DR., Hwy. 77. Exec: Howard Metzger. (M12-C370-D7)

Brownwood, Tex. SUNSET DR., Hwy. 84. Exec: Ed. Newman. (M12-C500-D7)

Bryan, Tex. SKYWAY DR., Hwy. 6. Exec: Jack A. Farr. (M9-C300-D7)

Carthage, Tex. SMITH'S DR. Exec: Wilton Smith. (M12-C400-D7)

Childress, Tex. CARVU DR. Exec: Phillips and Layton. (M12-C350-D7)

Cisco, Tex. JOY DR. Exec: Joy N. Houck, Joy Theatres Ct. (M12-C250-D7)

Cleburne, Tex. CHIEF DR. Exec: Video Ind. Theatres, Inc. (M12-C300-D7)

Coleman, Tex. OAKS DR., Hwy. 84. Exec: R. Duus. (M12-C250-D7)

Colorado, Tex. TEXAS DR. Exec: Robb and Rowley United Ct., Dallas. (M12-C400-D7)

Corpus Christi, Tex. BLVD. DR., Lexington Blvd. Exec: Southwest Theatres. (M12-C300-D7)

Corpus Christi, Tex. GULF DR. Exec: Ezell and Associates Ct., Dallas. (M12-C750-D7)

Corpus Christi, Tex. CORPUS DR., Hwy. 9. Exec: Southwest Theatres Ct. (M12-C700-D7)

Corsicanna, Tex. NAVARRO DR., Hwy. 287. Exec: E. W. Capps. (M12-C300-D7)

Cuero, Tex. CUERO DR. Exec: Video Independent Theatres, Inc. (M12-C250-D7)

Dallas, Tex. BUCKNER BLVD. DR. Exec: Ezell and Associates Ct. (M12-C664-D7)

Dallas, Tex. CHALK HILL DR., Dallas-Ft. Worth Hwy., Rt. 80. Exec: Ezell and Associates Ct. (M12-C650-D7)

Dallas, Tex. DRIVE IN, Denton Rd. Exec: Leon Theatres, 2011½ Jackson St. (M12-C400-D7)

Dallas, Tex. DRIVE IN, Garland Rd. Exec: Leon Theatres, 2011½ Jackson St. (M12-C400-D7)

Dallas, Tex. DRIVE IN, Hampton Place. Exec: Leon Thea., 2011½ Jackson St. (M12-C400-D7)

Dallas, Tex. HI VUE DR., 5525 S. Beckley. Exec: Conoman and P. E. Moran. (M12-C500-D7)

Dallas, Tex. KAUFMAN PIKE DR., Hwy. 175. Exec: Chas. W. Weisenburg. (M12-C300-D7)

Dallas, Tex. NORTHWEST HIGHWAY DR., Northwest Hwy. and Hillcrest. Exec: Ezell and Associates Ct. (M12-C552-D7)

Dallas, Tex. SOUTH LOOP DR. Exec: Harold Brooks. (M12-C500-D7)

Del Rio, Tex. CENIZA DR. Exec: Robb and Rowley United Ct., Dallas. (M12-C400-D7)

Denton, Tex. COLONIAL DR. Exec: George Franklin. (M12-C400-D7)

Denton, Tex. RANCHO DR. Exec: Lester Dollison. (M12-C400-D7)

Devine, Tex. MEDINA VALLEY DR. Exec: Carpenter Reed. (M12-C340-D7)

Dublin, Tex. TOWER DR. Exec: R. L. Roberts. (M12-C* -D7)

Dumas, Tex. PRAIRIE DR. Exec: Bob Powell. (M12-C* -D7)

Eagle Pass, Tex. NEW DR. Exec: P. R. Andrews. (M12-C* -D7)

Eagle Pass, Tex. OPEN AIR TH. Exec: C. C. Rodriguez. (M12-C350-D7)

Edcouch, Tex. SKYVIEW DR. Exec: F. P. Archer. (M9-C300-D7)

El Paso, Tex. AUTO CINE JUAREZ DR. Exec: R. G. Moya. (M12-C* -D7)

El Paso, Tex. BRONCHO DR. Exec: Abraham and Lou John. (M12-C550-D7)

El Paso, Tex. CROSSROADS DR. Exec: C. E. Peterson. (M12-C200-D7)

El Paso, Tex. DEL NORTE DR., Hwy. 80. Exec: Lone Star Theatres. (M12-C300-D7)

El Paso, Tex. EL PASO DR., Hwy. 290. Exec: Lone Star Theatres. (M12-C300-D7)

El Paso, Tex. FIESTA DR. Exec: W. O. Bearden and Benson. (M12-C500-D7)

Falfurrias, Tex. STAR DR. Exec: Van Chamberlain. (M12-C300-D7)

Fort Stockton, Tex. TRAIL DR., Hwy. 290. Exec: W. T. Ash. (M12-C300-D7)

Fort Worth, Tex. BELKNAP DR., 5709 E. Belknap Ave. Exec: Ezell and Associates Ct., Dallas. (M12-C654-D7)

Fort Worth, Tex. BOWIE BLVD. DR., Hwys. 80 and 377. Exec: Ezell and Associates Ct., Dallas. (M12-C500-D7)

Fort Worth, Tex. COWTOWN DR. Exec: Southwest Theatres. (M12-C* -D7)

Fort Worth, Tex. DRIVE IN. Exec: Ezell and Asociates Ct., Dallas (UNC). (M12-C* -D7)

Fort Worth, Tex. JACKSBORO DR. Exec: A. L. Watson. (M12-C400-D7)

Fort Worth, Tex. PIKE DR., Ft. Worth Pike, P.O. Box 8057. Exec: H. Gibbons. (M12-C400-D7)

Fort Worth, Tex. SOUTHSIDE DR. Exec: Southside Theatre Co. (M12-C450-D7)

Fredericksburg, Tex. 87 DR. Exec: H. A. Durst. (M12-C300-D7)

Freer, Tex. FREER DR. Exec: H. T. Telford. (M12-C300-D7)

Gainesville, Tex. HI HO DR., Hwy. 6. Exec: L. C. Dennis. (M12-C400-D7)

Garland, Tex. GARLAND DR. Exec: C. D. Leon. (M12-C* -D7)

Gladewater, Tex. COLONIAL DR., Hwy. 80. Exec: W. M. Morrow. (M12-C400-D7)

Graham, Tex. GRAHAM DR. Exec: E. L. Williamson. (M12-C300-D7)

Grand Prairie, Tex. DOWNS DR. Exec: Tim Ferguson. (M12-C400-D7)

Greenville, Tex. HUNT DR. Exec: C. C. Hamm. (M12-C350-D7)

Harlingen, Tex. VALLEY DR., Hwy. 83. Exec: Southwest Theatres. (M12-C250-D7)

Hereford, Tex. TOWER DR. Exec: Theatres Enterprises, Inc. Ct., Dallas. (M9-C400-D7)

Houston, Tex. DRIVE IN. Exec: Ezell and Associates Ct., Dallas (UNC). (M12-C* -D7)

Houston, Tex. EPSOM DR., 9700 Humble Rd. Exec: W. V. Ratcliff. (M12-C200-D7)

Houston, Tex. MARKET ST. DR. Exec: C. H. Mitchamore. (M12-C400-D7)

Houston, Tex. NEW AIRLINE DR. Exec: Lone Star Theatres, Inc. (M12-C300-D7)

Houston, Tex. POST OAK DR. Exec: Jack Groves. (M12-C* -D7)

Houston, Tex. SHEPHERD ROAD DR., Conroe Hwy. Exec: Ezell and Associates Ct., Dallas. (M12-C504-D7)

Houston, Tex. SOUTH MAIN DR., Old Fort Bend Rd. Exec: Ezell and Associates Ct., Dallas. (M12-C747-D7)

Houston, Tex. WINKLER DR., Telephone Rd. Exec: Ezell and Associates Ct., Dallas. (M12-C628-D7)

Huntsville, Tex. NEW DR. Exec: Fred Smith. (M12-C* -D7)

Karnes City, Tex. MIDWAY DR., P.O. Box 659. Exec: Pawelek and Linhart. (M12-C275-D7)

Kermit, Tex. DRIVE IN. Exec: C. H. Mitchamore. (M12-C300-D7)

Kermit, Tex. TOWER DR. Exec: Video Independent Theatres Ct. (M12-C300-D7)

Kerrville, Tex. BOLERO, DR., Hwy 27. Exec: C. H. Mitchamore. (M12-C350-D7)

Killeen, Tex. KILLEEN DR. Exec: Robb and Rowley United Ct., Dallas. (M12-C400-D7)

Kingsville, Tex. HIWAY DR. Exec: L. E. Harvey. (M12-C300-D7)

Kingsville, Tex. KING'S DR., P.O. Box 331. Exec: Joseph and Kyle, Inc. (M12-C370-D7)

La Grange, Tex. SKY HI DR., Hwy. 77. Exec: Lela Kimbrough. (M12-C250-D7)

La Marque, Tex. BAYOU DR. Exec: M. K. McDaniel. (M12-C300-D7)

Lamesa, Tex. SKYVUE DR., Hwys. 87 and 180. Exec: R. A. Norvt. (M12-C350-D7)

Lamesa, Tex. YUCCA DR., Hwy. 87. Exec: Audry Cox. (M12-C250-D7)

La Pryor, Tex. NEW DR. Exec: Mr. Hartung. (M12-C*-D7)

Laredo, Tex. EL RANCHO DR. Exec: Robb & Rowley United Ct., Dallas. (M12-C400-D7)

Laredo, Tex. TOWER DR., Hwy. 81. Exec: Arnulfo Gonzales. (M12-C500-D7)

Levelland, Tex. SPADE DR., Hwy. 290. Exec: Wallace Blankenship. (M12-C250-D7)

Littlefield, Tex. L. F. D. DR., Hwy. 84. Exec: W. J. Chesher. (M12-C400-D7)

Longview, Tex. RIVER ROAD DR. Exec: Jefferson Amuse. Co. Ct., Beaumont. (M12-C325-D7)

Lubbock, Tex. CIRCLE DR. Exec. Marvin McLarty. (M12-C400-D7)

Lubbock, Tex. CORRAL DR., Hwy. 82. Exec. Video Ind. Theatres, Inc. (M12-C500-D7)

Lubbock, Tex. FIVE POINT DR., Hwy. 62. Exec: Preston E. Smith. (M12-C400-D7)

Lubbock, Tex. WESTERNER DR., Hwy. 290. Exec: Lone Star Theatres, Inc. (M12-C350-D7)

Pasadena, Tex. DRIVE IN. Exec: Ezell & Associates Ct., Dallas. (M12-C678-D7)

Pecos, Tex. SUNSET DR. Exec: Theatre Enterprises, Inc., Ct., Dallas. (M12-C400-D7)

Pharr, Tex. CACTUS DR., Hwy. 83. Exec: Ezell & Associates Ct., Dallas. (M12-C450-D7)

Plainview, Tex. PIONEER DR., Hwy. 70. Exec: Bob Moran. (M12-C400-D7)

Plainview, Tex. SUNSET DR. Exec: Price Holland. (M12-C400-D7)

Port Arthur, Tex. SURF DR. Exec: Jefferson Amusement Ct., Beaumont. (M12-C400-D7)

Port Lavaca, Tex. PORT DR. Exec: Chas. Griffin. (M12-C300-D7)

Rockdale, Tex. REEL DR., Hwy. 79. Exec: Mrs. C. W. Matson. (M12-C300-D7)

San Angelo, Tex. STARDUST DR., Hwy. 87. Exec: R. H. Hendrick. (M12-C300-D7)

San Angelo, Tex. STARLITE DR. Exec: R. V. Starling. (M12-C250-D7)

San Angelo, Tex. TWILIGHT DR., Hwy. 87. Exec: R. V. Starling. (M12-C300-D7)

San Antonio, Tex. ALAMO DR., Hwy. 81. Exec: Southwest Theatres Ct. (M12-C250-D7)

San Antonio, Tex. FREDERICKSBURG RD. DR., Hwy. 87. Exec: Ezell & Associates Ct., Dallas. (M12-C552-D7)

San Antonio, Tex. HI PARK DR. Exec: C. H. Wheeler. (M12-C500-D7)

Tuscola, Tex. JIM [illegible]. Exec: Tom Tucker. (M12-C150-D7)

Tyler, Tex. CREST DR. Exec: Interstate Theatres Ct., Dallas. (M12-C400-D7)

Tyler, Tex. STARLIGHT DR. Exec: C. D. Leon. (M12-C225-D7)

Uvalde, Tex. GAY 90 DR. Exec: Theatre Enterprises Ct., Dallas. (M12-C350-D7)

Uvalde, Tex. STARDUST DR. Exec: J. C. Dunn. (M12-C450-D7)

Vernon, Tex. CACTUS DR. Exec: C. C. Hamm. (M12-C370-D7)

Vernon, Tex. EL RANCHO DR. Exec: J. L. Groves. (M12-C400-D7)

Victoria, Tex. TEJAS DR., Hwy. 295. Exec: R. Frels. (M12-C300-D7)

Waco, Tex. CIRCLE DR., 2112 LaSalle St. Exec: Ezell and Associates Ct., Dallas. (M12-C603-D7)

Waco, Tex. WACO DR., Hwy. 81. Exec: Lone Star Theatres, Inc. (M12-C250-D7)

Waco, Tex. WESTVIEW DR., Hwy. 6. Exec: Ed Newman. (M12-C500-D7)

Waxahachie, Tex. ELLIS DR. Exec: Robb & Rowley-United Ct., Dallas. (M12-C400-D7)

Weatherford, Tex. JONES DR., Hwy. 180. Exec. C. H. Jones. (M12-C385-D7)

Wichita Falls, Tex. FALLS DR., Hwy. 277. Exec: John Sands. (M12-C400-D7)

Wichita Falls, Tex. OPEN AIR DR., Hwy. 287. Exec: Bradley and Bradley. (M12-C220-D7)

Wichita Falls, Tex. SCOTTIE DR. Exec: John Sands. (M12-C400-D7)

Wichita Falls, Tex. SKYWAY DR., Hwy. 79. Exec: Lin Harrington. (M12-C350-D7)

Winters, Tex. FIESTA DR. Exec: Hodge Ct. (UNC). (M12-C300-D7)

Ysleta, Tex. BRONCHO DR. Exec: E. Abraham. (M12-C550-D7)



A PARTIALLY SUNKEN PROJECTION BOOTH is desirable where drainage permits. This is the BUCKHORN, MISSION, TEX., where National Theatre Supply installed Simplex projection and sound.

Lufkin, Tex. REDLAND DR. Exec: Jefferson Amuse. Co. Ct., Beaumont. (M12-C400-D7)

Lufkin, Tex. SKYVIEW DR. Exec: L. G. Chambers. (M12-C*-D7)

Marlin, Tex. CORRAL DR., Hwy. 7. Exec: H. C. Studele, 3509 Rushti St., Ft. Worth. (M12-C300-D7)

Marlin, Tex. ROYAL DR. Exec: E. L. Williamson. (M12-C*-D7)

McAllen, Tex. PALMS DR. Exec: Richard L. Bull. (M12-C400-D7)

Mertzon, Tex. MERTZON DR., Hwy. 67. Exec: O. M. Kirksby. (M12-C200-D6)

Midland, Tex. CHIEF DR., Hwy. 158. Exec: Video Ind. Theatres Ct. (M12-C600-D7)

Midland, Tex. TEXAN DR., Hwy. 80. Exec: Jones & Jones. (M12-C300-D7)

Mission, Tex. BUCKHORN DR. Exec: H. C. Gunter. (M12-C300-D7)

Monahans, Tex. CORRAL DR. Exec: A. R. Smith. (M12-C277-D7)

New Braunfels, Tex. TOWER DR. Exec: Lone Star Theatres, Inc. (M12-C*-D7)

Necna, Tex. CHIEF DR. Exec. C. E. Campbell. (M12-C250-D7)

Odessa, Tex. BRONCHO DR. Exec: Hodge Ct. (M9-C300-D7)

Odessa, Tex. CACTUS DR., Hwy. 80. Exec: (M12-C300-D7)

Orange, Tex. MacARTHUR DR. Exec: Jefferson (M12-C*-D7)

Palestine, Tex. DOGWOOD DR. Exec: Robb & (M12-C400-D7)

Palestine, Tex. MOONLITE DR. Exec: L. S. (M12-C[illegible]-D7)

Paris, Tex. DRIVE IN. Exec: Interstate Theatres (M12-C*-D7)

Paris, Tex. [illegible] DR., Hwy. 271. Exec: Bell (M12-C[illegible]-D7)

San Antonio, Tex. KELLEY FIELD DR., Trio City Rd. Exec: Southwest Theatres Ct. (M12-C400-D7)

San Antonio, Tex. MISSION DR., Hwy. 281. Exec: Southwest Theatres Ct. (M12-C400-D7)

San Antonio, Tex. SAN PEDRO OUTDOOR TH., Hwy. 281. Exec: Al Wolfe. (M12-C450-D7)

San Antonio, Tex. TRAIL DR., Military Road Hwy. Exec: Ezell & Associates Ct., Dallas (M12-C679-D7)

San Antonio, Tex. VARSITY DR. Exec: Mid-Den Enterprises. (M12-C438-D7)

San Benito, Tex. BRADY DR. Exec: Ed Brady, (M12-C[illegible]-D7)

San Marcos, Tex. KING DR. Exec: G. J. Rieder, (M12-C[illegible]-D7)

Seguin, Tex. DIXIE DR. Exec: H. A. [illegible], (M12-C[illegible]-D7)

Sherman, Tex. CAMPUS DR. Exec: Robb & Rowley United Ct., Dallas. (M12-C[illegible]-D7)

Sherman, Tex. TWIN CITIES DR., Hwy. 75. Exec: C. D. Leon. (M12-C[illegible]-D7)

Snyder, Tex. DRIVE IN. Exec: Phil Isley (UNC). (M12-C[illegible]-D7)

Snyder, Tex. DRIVE IN. Exec: John Blocher (UNC). (M12-C[illegible]-D7)

Snyder, Tex. STARLIGHT DR. Exec: Joe Love, (M12-C300-D7)

Stamford, Tex. H & H DR. Exec: Hodge Ct. (M12-C300-D7)

Stephenville, Tex. TOWER DR. Exec: Mauldin and Roberts. (M12-C400-D7)

Sweetwater, Tex. MIDWAY DR., Hwy. 80. Exec: J. D. Wallace. (M12-C300-D7)

Taylor, Tex. R & R DR. Exec: Robb & Rowley-United Ct., Dallas. (M12-C400-D7)

Temple, Tex. SUNSET DR., Hwy. 36. Exec: Jake Webb. (M12-C300-D7)

Temple, Tex. TEM BEL DR., Hwy. 81. Exec: Skelton Bros. (M12-C300-D7)

Terrel, Tex. R & R DR. Exec: Robb & Rowley-United Ct., Dallas. (M12-C400-D7)

DENVER TERRITORY

Colorado

Boulder, Colo. MOTORENA DR., P. O. Box 671. Exec: Irving Gilman. (M8-C300-D7)

Brighton, Colo. KAR-VUE DR. Exec: E. K. Menagh. (M8-C350-D7)

Canon City, Colo. SUNSET DR. Exec: George McCormick. (M8-C275-D7)

Colorado Springs, Colo. STARLIGHT DR. Exec: Paul Rothman. (M8-C450-D7)

Delta, Colo. SKYLIGHT DR. Exec: Max Storey. (M8-C350-D7)

Denver, Colo. DENVER KAR-VU DR., 40th Ave. and Monaco Blvd. Exec: Denver Kar-Vu, Inc. (M8-C750-D7)

Denver, Colo. EAST DR., 12600 E. Colfax Ave. Exec: John Wolfberg, Denver Drive-In Theatres Ct., Broadway Theatre, Denver. (M8-C900-D7)

Denver, Colo. NORTH DR. Exec: John Wolfberg, Denver Drive-In Theatres Ct., Broadway Theatre, Denver. (M8-C850-D7)

Denver, Colo. SOUTH DR. Exec: John Wolfberg, Denver Drive-In Theatres Ct., Broadway Theatre, Denver. (MS-C950-D7)

Denver, Colo. WEST DR., 6th and Kipling Aves. Exec: John Wolfberg, Denver Drive-In Theatres Ct., Broadway Theatre, Denver. (M8-C1000-D7)

Ft. Collins, Colo. SUNSET DR. Exec: Joe LaConte. (MS-C350-D7)

Grand Junction, Colo. STARLIGHT DR., 2400 North Ave. Exec: Loyd Files. (M8-C300-D7)

Greeley, Colo. GREELEY DR. Exec: Emmett Bayard. (M8-492-D7)

Greeley, Colo. MOTORENA DR., 7300 N. Federal Blvd. Exec: Lem Lee. (MS-C400-D7)

La Junta, Colo. LA JUNTA DR. Exec: C. Alderson & W. Barton. (M8-C350-D7)

Montrose, Colo. DRIVE IN. Exec: Harry Barnett and George DeVries. (M8-C350-D7)

Pueblo, Colo. LAKE DR. Exec: Lionel Semon. (MS-C500-D7)

Pueblo, Colo. PUEBLO DR. Exec: Lionel Semon. (MS-C500-D7)

Sterling, Colo. STARLITE DR. Exec: (*). (MS-C350-D7)

Trinidad, Colo. PEAK DR. Exec: John Sawaya. (MS-C325-D7)

Nebraska

Alliance, Neb. STARLITE DR. Exec: Burdett L. Fitch. (M7-C300-D7)

Mitchell, Neb. HI WAY DR. Exec: Brown and Marty Theatre Co. (M7-C300-D7)

North Platte, Neb. PAWNEE DR. Exec: W. L. Smith. (M7-C530-D7)

Scottsbluff, Neb. BIGGERS DR. Exec. Floyd Biggers. (M7-C500-D7)

New Mexico

Las Cruces, N. M. ORGAN DR. Exec: H. F. Boyington. (M7-C370-D7)

Las Vegas, N. M. VEGAS DR. Exec: Gus Daskalos and Steve Nitse. (M7-C350-D7)

Raton, N. M. 85 DR. Exec: Floyd Davis and Nat Jones. (M10-C320-D7)

Tucumcari, N. M. COUNTY DR. Exec: L. R. Yessler. (M10-C378-D7)

South Dakota

Rapid City, S. D. STARLIGHT DR. Exec: Black Hills Amuse. Ct., Deadwood. (M7-C550-D7)

Wyoming

Casper, Wyo. SKYLINE DR. Exec: Skyline Amuse. Ct. (M7-C400-D7)

Cheyenne, Wyo. MOTOR-VU DR. Exec: Skyline Amuse. Ct. (M7-C450-D7)

Cody, Wyo. WEST DR. Exec: Richard Haberman. (M7-C300-D7)

Lander, Wyo. DIANE DR. Exec: A. M. Goodrich. (M7-C300-D7)

Laramie, Wyo. SKYLINE DR. Exec: Skyline Amuse. Ct. (M7-C400-D7)

Lovell, Wyo. MIDWAY DR. Exec: Al Davis, Byron, Wyo. (M7-C211-D7)

Powell, Wyo. PAUL'S DR. Exec: Paul McCalmon. (M7-C200-D7)

Rawlins, Wyo. SKYLINE DR. Exec: Skyline Amuse. Ct. (M7-C300-D7)

Riverton, Wyo. KNIGHT DR. Exec: Tom Knight. (M7-C400-D7)

Riverton, Wyo. MIDWAY DR. Exec: R. C. Otwell. (M7-C300-D7)

Riverton, Wyo. WEST DR. Exec: F. W. Chopping, C. E. Shaw, and J. W. Neighbors. (M8-C300-D7)

Rock Springs, Wyo. STARLITE DR. Exec: Starlite Theatre Co. (M7-C200-D7)

Sheridan, Wyo. SKYLINE DR. Exec: Skyline Amusement Ct. (M7-C438-D7)

Torrington, Wyo. KAR VU DR. Exec: Charles D. Steward. (M7-C342-D7)

DES MOINES TERRITORY

Iowa

Algona, Ia. STARLIGHT DR. Exec: Earl Spike. (M7-C350-D7)

Ames, Ia. AMES DR. Exec: Central States Ct. (M6-C500-D7)

Ames, Ia. RANCH DR. Exec: Ames Theatre Co. (M7-C750-D7)

Atlantic, Ia. CORRAL DR. Exec: Pioneer Theatre Corp. Ct. (M7-C300-D7)

Burlington, Ia. DRIVE IN. Exec: Central-States Ct. (M7-C400-D7)

Carroll, Ia. DRIVE IN. Exec: Pioneer Theatre Corp. Ct. (M7-C300-D7)

Cedar Rapids, Ia. DRIVE IN. Exec: Tri-States Ct. (M7-C600-D7)

Clear Lake, Ia. CLEAR LAKE DR. Exec: Central States Ct. (M6-C600-D7)

Clinton, Ia. DRIVE IN. Exec: Central-States Ct. (M7-C400-D7)

Davenport, Ia. BEL AIR DR., Fair Grounds. Exec: J. Geertz. (M7-C700-D7)

Des Moines, Ia. DES MOINES DR., S.E. 14th and Hart Sts. Exec: Tri-States Ct. (M7-C700-D7)

Des Moines, Ia. TOWN DR., Hwy. 6. Exec: Jack Siegel. (M7-C500-D7)

Dubuque, Ia. DRIVE IN. Exec: Tri-States Ct. (M7-C500-D7)

Fort Dodge, Ia. DRIVE IN, Hwy. 169. Exec: W. Warner. (M7-C224-D7)

Iowa City, Ia. DRIVE IN. Exec: Tri-States Ct. (M7-C300-D7)

Jefferson, Ia. DRIVE IN. Exec: Pioneer Theatre Corp. Ct. (M7-C250-D7)

Mason City, Ia. DRIVE IN. Exec: Central-States Ct. (M7-C500-D7)

Marshalltown, Ia. MARSHALLTOWN DR. Exec: H. Schmodt. (M7-C300-D7)

Milford, Ia. LAKELAND DR. Exec: (*). (M7-C300-D7)

Newton, Ia. DRIVE IN. Exec: S. M. Rhodes. (M7-C250-D7)

Oskaloosa, Ia. DRIVE IN. Exec: Tri-States Ct. (M7-C400-D7)

Ottumwa, Ia. DRIVE IN. Exec: Tri-States Ct. (M7-C500-D7)

Perry, Ia. DRIVE IN. Exec: Pioneer Theatre Corp. Ct. (M7-C300-D7)

Spencer, Ia. DRIVE IN. Exec: Pioneer Theatre Corp. Ct. (M7-C300-D7)

Storm Lake, Ia. DRIVE IN. Exec: Pioneer Theatre Corp Ct. (M7-C350-D7)

Waterloo, Ia. STARLITE DR., Hwy. 218. Exec: Steven A. Oellerich. (M7-C700-D7)

Webster City, Ia. DRIVE IN. Exec: Pioneer Theatre Corp. Ct. (M7-C250-D7)

Illinois

Milan, Ill. MEMRI DR., Hwys. 67, 92 and 6. Exec: W. A. Brotman. (M7-C700-D7)

DETROIT TERRITORY

Michigan

Adrian, Mich. DRIVE IN, 3000 N. Adrian Rd. Exec: Vincent Ochs. (M7-C400-D7)

Adrian, Mich. LENAWEE AUTO TH. Exec: Adrian Drive-In Thea. Co, Inc. (M7-C300-D7)

Albion, Mich. ALBION DR. Exec: W. Campbell, Reading, Mich. (UNC). (M7-C750-D7)

Ann Arbor, Mich. YPSI ANN DR., 4675 Washtenaw St. Exec: A. Robinson. (M7-C400-D7)

Battle Creek, Mich. AUTO TH., Rt. 12. Exec: Paul O. Brake. (M7-C400-D7)

Bay City, Mich. TUSCOLA DR., Rt. M-15. Exec: H. Bernstein. (M7-C750-D7)

Benton Harbor, Mich. STARLITE DR., Rt. M-139. Exec: J. M. McKernnan. (M7-C450-D7)

Coldwater, Mich. COLDWATER DR. Exec: William Schulte. (M7-C300-D7)

Constantine, Mich. AUTO TH., Rt. 131. Exec: Hal Lego. (M7-C125-D7)

Dearborn, Mich. DEARBORN DR., 26500 Ford Rd. Exec: James Ross. (M7-C650-D7)

Deckerville, Mich. HI WAY DR. Exec: C. H. Clements. (M7-C400-D7)

Detroit, Mich. EAST SIDE DR., 19440 Harper St. Exec: Phil Smith Ct., Boston, Mass. (M7-C625-D7)

Detroit, Mich. TOWN DR., 9401 Telegraph Rd. Exec: Irving Goldberg. (M7-C1100-D7)

Ecorse, Mich. MICHIGAN DR., Rt. 25. Exec: Nicholas George. (M7-C650-D7)

Ferndale, Mich. WEST SIDE DR., 8 Mile and Schaefer Rds. Exec: Phil Smith Ct., Boston, Mass. (M7-C700-D7)

Flint, Mich. CORUNNA WEST SIDE DR., Rt. M-21. Exec: W. M. Rice. (M7-C775-D7)

Flint, Mich. DORT EAST SIDE DR., 3750 Dort Hwy. Exec: W. M. Rice. (M7-C775-D7)

Fraser, Mich. GRATIOT DR., 31900 Gratiot St. Exec: Alex Schreiber Ct., Detroit. (M7-C1000-D7)

Grand Rapids, Mich. BELTLINE DR., 1400 W. 28th St. Exec: Jack Locks. (M7-C850-D7)

Grand Rapids, Mich. DRIVE IN, 5566 S. Division St. Exec: H. J. Ochs. (M7-C600-D7)

Hillsdale, Mich. DRIVE IN, Rt. M-99. Exec: Howard Sharpley. (M7-C200-D7)

Holland, Mich. STARLITE DR. Exec: Holland Drive-In Corp. (M7-C350-D7)

Jackson, Mich. DRIVE IN, 4400 Ann Arbor Rd. Exec: Lawrence J. Aubry. (M7-C400-D7)

Kalamazoo, Mich. AUTO TH., 4488 Portage Rd. Exec: A. W. Ochs. (M7-C400-D7)

Lansing 15, Mich. LANSING DR., 5097 S. Cedar St. Exec: Lawrence J. Aubry. (M7-C400-D7)

Marlette, Mich. H & S DR. Exec: Tim Hunt. (M7-C400-D7)

Monroe, Mich. DIXIE DR., 6720 N. Monroe St. Exec: Joseph Weisberg. (M7-C300-D7)

Mount Morris, Mich. NORTH FLINT DR., P.O. Box 65. Exec: Ulmer, Gordon and Berne. (M7-C760-D7)

Muskegon, Mich. AUTO DR., 4291 Grand Haven Rd. Exec: A. W. Ochs. (M7-C400-D7)

Muskegon, Mich. N. K. DR. Exec: Nick Kuris. (M7-C1000-D7)

Niles, Mich. NILES OUTDOOR TH., Rt. 31. Exec: Manta and Rose Ct. (M7-C1000-D7)

Plainwell, Mich. DRIVE IN. Exec: Harold Kortes and Charles Sears (UNC). (M7-C* -D7)

Pontiac, Mich. BLUE SKY DR., 2150 Opydyke St. Exec: A. Robinson. (M7-C400-D7)

Pontiac, Mich. STARLITE DR., Williams Lake and Airport Rd. Exec: J. F. Warden. (M7-C300-D7)

Port Huron, Mich. DRIVE IN, 5737 Lake Rd. Exec: H. J. Ochs. (M7-C600-D7)

Royal Oak, Mich. OAK DR. Exec: Alden Smith. (M7-C1000-D7)

Saginaw, Mich. SAGINAW AUTO TH., 5151 Genesee St. Exec: A. W. Ochs. (M7-C400-D7)

Saginaw, Mich. TWILIGHT DR., 10 Mile Rd. Exec: R. Ashmun. (M7-C400-D7)

St. Louis, Mich. SKY TOP DR. Exec: James Langston. (M7-C400-D7)

Waterford, Mich. STARLITE DR. Exec: Starlite Theatre Corp. (M7-C600-D7)

Walled Lake, Mich. DRIVE IN. Exec: E. J. Patineau (closed). (M7-C120-D7

Wayne, Mich. DRIVE IN. Exec: W. D. Shafer, c/o State Theatre. (M7-C800-D7)

INDIANAPOLIS TERRITORY

Indiana

Anderson, Ind. DRIVE IN, Hwy. 32. Exec: Alliance Theatre Ct. (M7-C480-D7)

Angola, Ind. LAKELAND DR. Exec: Clair Stuckey and M. H. Schneidler. (M7-C840-D7)

Attica, Ind. DRIVE IN. Exec: A. E. Campbell Ct. (M7-C500-D7)

Attica, Ind. WABASH DR. Exec: Carl Noggle. (M7-C500-D7)

Bass Lake, Ind. DRIVE IN. Exec: (*) (UNC). (M7-C* -D7)

Bedford, Ill. BEDFORD DR. Exec: Y & W Circuit. (M7-C500-D7)

Bloomington, Ind. DRIVE IN. Exec: Alliance Theatre Ct. (M7-C500-D7)

Claremont, Ind. DE LUXE DR. Exec: Paul Boatman. (M7-C500-D7)

Clayton, Ind. MAPLECROFT DR. Exec: Charles F. Morrison, 1250 Waldemere St., Indianapolis. (M7-C250-D7)

Columbus, Ind. COLUMBUS DR. Exec: Trueman T. Rembusch, Syndicate Theatres Ct., Franklin. (M9-C* -D7)

Connersville, Ind. CONNERSVILLE DR., 2 mi. W. of Connersville. Exec: Roy Harrold, Rushville, Ind. (M7-C400-D7)

Corydon, Ind. SKY AIR DR. Exec: A. E. Campbell Ct. (M7-C350-D7)

Crawfordsville, Ind. BEN HUR DR. Exec: Bert Rayburn. (M7-C300-D7)

Crawfordsville, Ind. C-VILLE DR. Exec: Joe Million. (M7-C400-D7)

Evansville, Ind. EVANSVILLE DR., Soonerville Hwy. Exec: H. N. Coleman. (M7-C600-D7)

Evansville, Ind. FAMILY DR., P.O. R.R. 10. Exec: Ted Granlich. (M7-C425-D7)

Fort Wayne, Ind. FORT WAYNE DR., 5500 Bluffton Rd. Exec: Herbert Ochs. (M7-C500-D7)

Fort Wayne, Ind. WAYNE AUTO TH., Hwy. 33. Exec: Walter Frie. (M7-C450-D7)

Fountaintown, Ind. MOONLIGHT DR., Hwy. 52. Exec: Irving Tumler. (M7-C500-D7)

Frankfort, Ind. FRANKFORT DR. Exec: Alliance Theatres Ct. (M7-C400-D7)

Geneva, Ind. LIMBERLOST DR. Exec: A. E. Campbell Ct. (M7-C250-D7)

Greenwood, Ind. GREENWOOD DR., P.O. R.R. 3. Exec: A. W. Hansen. (M7-C600-D7)

Indianapolis, Ind. WESTSIDE OUTDOOR TH. Exec: Forrest Songer. (M7-C600-D7)

Jasper, Ind. FAMILY DR. Exec: Midway Amuse. Corp. (M*-C* -D*)

Jeffersonville, Ind. THEATAIR DR. Exec: K. McSeeliste, P.O. R.R. 2, Jeffersonville. (M7-C400-D7)

Kokomo, Ind. KOKOMO DR., Hwy. 54. Exec: Alliance Theatres Ct. (M7-C500-D7)

Lafayette, Ind. LAFAYETTE DR., Hwy. 26. Exec: A. E. Campbell Ct. (M7-C450-D7)

Lawrence, Ind. LAWRENCE DR., Pendleton Pike. Exec: Phil Smith Ct., Boston, Mass. (M7-C500-D7)

Linton, Ind. LINTON DR. Exec: A. E. Campbell Ct. (M7-C300-D7)

Logansport, Ind. SKYLINE DR., P.O. R.R. 17. Exec: Alliance Theatres Ct. (M7-C250-D7)

Madison, Ind. SKYLINE DR. Exec: A. E. Campbell Ct. (M7-C400-D7)

Marion, Ind. HIGHWAY DR., 26th St. and Bypass. Exec: Alliance Thea. Ct. (M7-C640-D7)

Marion, Ind. MARIONAIR DR. Exec: Wm. Conners, 620 W. 3rd St., Marion. (M7-C500-D7)

Martinsville, Ind. AIRPORT OUTDOOR TH., 990 S. Lincoln St. Exec: A. E. Campbell Ct. (M7-C150-D7)

Maywood, Ind. MAYWOOD DR. Exec: Melvin E. Cox. (M7-C300-D7)

Mechanicsburg, Ind. LEBANON - FRANKFORT DR. Exec: Charles F. Morrison, 1250 Waldemere St., Indianapolis. (M7-C400-D7)

Monticello, Ind. MONTICELLO DR. Exec: A. E. Campbell Ct. (M7-C400-D7)

Muncie, Ind. DRIVE IN. Exec: Muncie Theatre Realty (UNC). (M7-C700-D7)

Muncie, Ind. MUNCIE DR. Exec: Y and W Circuit. (M7-C500-D7)

New Castle, Ind. SKYDROME TH. Exec: Marcus-Wolf and Mendelssohn. (M7-C500-D7)

Oakland City, Ind. OAKLAND DR. Exec: A. E. Campbell Ct. (M7-C350-D7)

Princeton, Ind. PRINCETON DR. Exec: Princeton Drive-In Corp. (M7-C400-D7)

Richmond, Ind. NATIONAL HI WAY DR. Exec: Robert Hudson. (M7-C480-D7)

Rockville, Ind. FAMILY DR. Exec: Forrest Songer. (M7-C300-D7)

Seeleyville, Ind. SEELEYVILLE DR., Hwy. 40. Exec: F. O. Hilligas. (M7-C500-D7)

Seymour, Ind. STARDUST DR. Exec: A. E. Campbell Ct. (M7-C420-D7)

Tell City, Ind. STARLITE DR. Exec: E. L. Ornstein. (M7-C420-D7)

Terre Haute, Ind. EAST SIDE AUTO TH. Exec: Marcus-Wolf and Mendelssohn. (M7-C600-D7)

Terre Haute, Ind. TERRE HAUTE DR. Exec: Herb Ochs. (M7-C600-D7)

Veedersburg, Ind. 41 DR. Exec: Joe Million. (M7-C250-D7)

Vincennes, Ind. VINCENNES DR. Exec: Alliance Theatres Ct. (M7-C470-D7)

Winchester, Ind. AIR LINE DR. Exec: Louis Wetzel, Union City, Ind. (M7-C300-D7)

Winchester, Ind. WINCHESTER AUTO TH. Exec: Arthur Kemp. (M7-C400-D7)

Kentucky

Bardstown, Ky. DRIVE IN. Exec: Hahn and Barnett. (M7-C400-D7)

Bardstown, Ky. GYPSY DR. Exec: A. E. Campbell Ct. (M7-C400-D7)

Bowling Green, Ky. SUNSET DR., P.O. Box 894. Exec: A. E. Campbell Ct. (M7-C400-D7)

Elizabethtown, Ky. STARLITE DR. Exec: Bob Enoch. (M8-C400-D7)

Glasgow, Ky. BREEZE DR. Exec: L. H. Lowe (closed). (M7-C250-D7)

Hopkinsville, Ky. B & W DR., Hwy. 49. Exec: George Edwards and Shelby McCallum. (M7-C200-D7)

Lebanon, Ky. DRIVE IN, Hwy. 49. Exec: C. C. Sims. (M7-C250-D7)

Louisville, Ky. KENWOOD DR. Exec: Walter Hood, 6621 Estelle Ave. (M7-C700-D7)

Louisville, Ky. SKYWAY DR. Exec: A. E. Campbell Ct. (M7-C500-D7)

Louisville, Ky. PARKWAY DR., P.O. Box 480, Rt. 5. Exec: A. E. Campbell Ct. (M7-C400-D7)

Madisonville, Ky. SUNSET DR. Exec: Crescent Amusement Ct. (M8-C500-D7)

Owensboro, Ky. MOONLITE DR. Exec: Andy Anderson. (M7-C400-D7)

Saint Matthews, Ky. SAINT MATTHEWS DR., Hwy. 31. Exec: Floyd Morrow. (M7-C500-D7)

Shivley, Ky. DIXIE DR., Hwy. 60. Exec: Floyd Morrow. (M7-C500-D7)

Shelbyville, Ky. DRIVE IN. Exec: (•) (UNC). (M7-C• -D7)

KANSAS CITY TERRITORY

Arkansas

Rogers, Ark. DRIVE IN, P.O. Box 135, Hwy. 71. Exec: Herbert H. Hinze. (M9-C400-D7)

Springdale, Ark. 71 DR. Exec: Commonwealth Theatres Ct., Kansas City, Mo. (M9-C400-D7)

Sulphur Springs, Ark. BIG SOMBRERO DR. Exec: Mrs. J. B. Covertson. (M9-C300-D7)

Kansas

Arkansas City, Kan. 166 DR. Exec: Fred Munson. (M7-C400-D7)

Clay Center, Kan. SKY LINE DR. Exec: K. H. Ehret and Gordon Erickson. (M9-C325-D7)

Coffeyville, Kan. TAL'S DR. Exec: Tal Richardson. (M9-C300-D7)

Dodge City, Kan. DODGE CITY DR. Exec: Glen Cooper, 202 S. 2nd St. (M6-C300-D7)

Emporia, Kan. 50 SOUTH DR. Exec: William Flynn. (M9-C400-D7)

Garden City, Kan. GARDEN CITY DR. Exec: Glen Cooper, 202 S. 2nd St., Dodge City. (M6-C300-D7)

Goodland, Kan. DRIVE IN. Exec: (•) (UNC). (M9-C• -D7)

Great Bend, Kan. GREAT BEND DR. Exec: Mrs. Audrey Flynn. (M7-C400-D7)

Hays, Kan. HAYS DR., P.O. Box 178. Exec: Glen Cooper, 202 S. 2nd St., Dodge City, Kan. (M7-C300-D7)

Hutchinson, Kan. AYR-VU DR. Exec: Jay Wooten. (M9-C350-D7)

Hutchinson Kan. IRIS DR. Exec: Carl Sproule. (M9-C542-D7)

Junction City, Kan. MIDWAY DR. Exec: Warren Weber and Vic Harris. (M9-C500-D7)

Kansas City, Kan. KANSAS DR., Stoney Point Rd. and Hwy. 40. Exec: Rube Finkelstein. (M7-C600-D7)

Lawrence, Kan. LAWRENCE DR. Exec: Commonwealth Theatres Ct. (M9-C365-D7)

Leavenworth, Kan. FORT DR. Exec: Beverly Miller. (M9-C450-D7)

Leavenworth, Kan. SKYLARK DR. Exec: Durwood Theatre Ct. (M9-C450-D7)

Liberal, Kan. GREAT WESTERN DR. Exec: Ben Adams, Roxy Th., El Dorado, Kan. (M9-C325-D7)

Lyons, Kan. DRIVE IN. Exec: Don Cuthbertson and Luther Osborne. (M9-C350-D7)

McPherson, Kan. STAR VIEW DR., P.O. Box 592. Exec: A. C. Smith. (M9-C450-D7)

Manhattan, Kan. SKY VU DR. Exec: Theatre Enterprises Ct. (M9-C400-D7)

Ottawa, Kan. HILLCREST DR. Exec: Glen Underwood. (M9-C350-D7)

Parsons, Kan. PARSONS DR. Exec: Louis Stein, 1709 Belmont St. (M9-C500-D7)

Pittsburg, Kan. SIXTY-NINE DR. Exec: G. W. Dickinson, Mission, Kan. (M9-C412-D7)

Pratt, Kan. TRAIL DR. Exec: Sol Frank. (M9-C400-D7)

Russell, Kan. SKY VU DR., P.O. Box 575. Exec: J. O. Murray, W. A. Michaelis, Jr. (M9-C400-D7)

Salina, Kan. EIGHTY-ONE DR. Exec: G. W. Dickinson, Mission. (M9-C600-D7)

Scott City, Kan. DRIVE IN. Exec: F. H. Rodenbeek. (M9-C260-D7)

Shawnee, Kan. SHAWNEE DR. Exec: Glen Dickinson, Mission. (M9-C750-D7)

Topeka, Kan. COMMUNITY DR. Exec: Claude Parrish, Liberty, Mo. (M9-C750-D7)

Topeka, Kan. STARLITE DR. Exec: Claude Parrish, Liberty, Mo. (M9-C500-D7)

Wichita, Kan. AIRPORT DR. Exec: Merle Barnes, c/o Nomar Th. (M7-C700-D7)

Wichita, Kan. EIGHTY-ONE DR. Exec: O. F. Sullivan, c/o Civic Th. (M7-C700-D7)

Wichita, Kan. FIFTY-FOUR DR. Exec: O. F. Sullivan, c/o Civic Th. (M7-C600-D7)

Wichita, Kan. PAWNEE DR. Exec: Al McClure. (M9-C400-D7)

Wichita, Kan. SKY VIEW DR. Exec: O. F. Sullivan, c/o Civic Th., P.O. Box 1542. (M9-C400-D7)

Winfield, Kan. DRIVE IN. Exec: Mr. and Mrs. Fred Munson. (M8-C• -D7)

Missouri

Camdenton, Mo. CAMDEN DR. Exec: E. E. Hopkins. (M9-C300-D7)

Carthage, Mo. 66 DR. Exec: Bill Bradfield. (M9-C500-D7)

Carthage, Mo. SUNSET DR. Exec: Clyde Lenson. (M9-C300-D7)

Hickman Mills, Mo. CREST DR. Exec: Commonwealth Theatres Ct. (M7-C800-D7)

Jefferson City, Mo. HI WAY DR. Exec: Beverly Miller. (M9-C385-D7)

Jefferson City, Mo. SKYLARK DR. Exec: Durwood Theatres Ct. (M9-C450-D7)

Joplin, Mo. TRI STATES DR. Exec: Commonwealth Theatres Ct. (M9-C583-D7)

Kansas City, Mo. 40 HI WAY DR. Exec: A. Berger. (M9-C750-D7)

Marshall, Mo. PARKSIDE DR. Exec: C. Thomas, Sweet Springs. (M9-C300-D7)

North Kansas City, Mo. RIVERSIDE DR. Exec: Commonwealth Theatres Ct. (M9-C800-D7)

Osage Beach, Mo. GRAND GLAIZE DR. Exec: V. L. Smith, 1612 Grand Ave., Kansas City. (M9-C250-D7)

Saint Joseph, Mo. BELT HIGHWAY DR. Exec: C. E. Martin, Jr. (M9-C600-D7)

Saint Joseph, Mo. SKYLARK DR., Belt Hwy. and Farnon St. Exec: Durwood Theatres Ct. (M9-C600-D7)

Sedalia, Mo. 50 HIWAY DR. Exec: Commonwealth Theatres Ct. (M9-C377-D7)

Springfield, Mo. SPRINGFIELD DR., Sunshine and Glenstone Aves. Exec: Commonwealth Theatres Ct. (M9-C400-D7)

LOS ANGELES TERRITORY

Arizona

Mesa, Ariz. PIONEER DR. Exec: Harry L. Nace Ct. (M12-C692-D7)

Phoenix, Ariz. CINEMA PARK DR., 5500 N. 7th St. Exec: Midway Enterprises. (M12-C1000-D7)

Phoenix, Ariz. INDIAN DR., Indian School Rd. and 27th Ave. Exec: Harry L. Nace Ct. (M12-C500-D7)

Phoenix, Ariz. PHOENIX DR., 3600 E. Van Buren. Exec: Harry L. Nace Ct. (M12-C500-D7)

Safford, Ariz. DRIVE IN. Exec: Louis Long, Jones Enterprises. (M12-C350-D7)

Tucson, Ariz. BILTMORE MOTOR VU DR., 600 W. Indio St. Exec: E. B. Pegram. (M12-C500-D7)

Tucson, Ariz. BROADWAY DR. Exec: Dallas E. Day. (M12-C• -D7)

Tucson, Ariz. MIDWAY DR., 4500 E. Speedway. Exec: Midwny Enterprises. (M12-C680-D7)

Tucson, Ariz. RODEO DR., 201 E. Pennsylvania St. Exec: Rodeo Drive-In Theatre Corp. (M12-C600-D7)

Yuma, Ariz. MESA DR., 891 - 4th Ave. Exec: W. P. Wickersham. (M12-C340-D7)

California

Arcadia, Cal. EDWARDS DR., Peck Rd. and Live Oaks. Exec: Edwards Theatres, 4907 N. Huntington Drive, Los Angeles 32. (M12-C750-D7)

Arlington, Cal. ARLINGTON DR. Exec: Cooperative Ct. (M12-C350-D7)

Bakersfield, Cal. CHESTER DR., S. Chester and Hwy. 99. Gannon Bros. (M12-C470-D7)

Bakersfield, Cal. 99 DR., 4444 Pierce Rd. Exec: Gannon Bros. (M12-C686-D7)

Bakersfield, Cal. TERRACE DR., 300 Terrace Way. Exec: Earle Johnson. (M12-C650-D7)

Bostonia, Cal. MOTOR VU DR., P.O. Box 230. Exec: So. Calif. Motor Vu Thea., Inc. (M12-C570-D3)

Burbank, Cal. PICKWICK DR., 1100 Alameda Ave. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C800-D7)

Burbank, Cal. SAN VAL DR., 2720 Winona Ave. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C590-D7)

Chula Vista, Cal. HARBOR DR., National Ave. (Hwy. 101). Exec: T. P. Huntington. (M12-C500-D7)

Clearwater, Cal. ROADIUM DR., 14711 S. Paramount Blvd. Exec: Modern Amuse. Co., Jim Finkler. (M12-C850-D7)

Compton, Cal. CENTRAL DR., Rosecrans East of Long Beach Blvd. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C900-D7)

Cypress, Cal. CINA CAR DR., 6612 Lincoln Blvd. Exec: Montgomery Bros. (M7-C875-D7)

El Centro, Cal. EL RANCHO DR., Hwy. 80. Exec: John Armm. (M12-C400-D7)

El Monte, Cal. EL MONTE DR., Lower Azusa Rd. at Ellis Lane. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C874-D7)

Gardena, Cal. VERMONT DR., 182nd and Vermont. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C769-D7)

Garvey, Cal. STARLITE DR. Exec: (•). (M12-C• -D7)

Harbor City, Cal. HARBOR DR., 23444 So. Vermont Ave. Exec: Great Western Thea., Inc. (M12-C600-D7)

Highland, Cal. BASELINE DR., 1785 Baseline. Exec: Harry Dickerman. (M12-C750-D7)

Imperial, Cal. MOTOR VU DR., P.O. Box 117. Exec: Motor Vu Theatre Co. (M12-C500-D7)

Inglewood, Cal. CENTURY DR., Century west of Crenshaw. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C980-D7)

Lemon Grove, Cal. CINEMA DINE, P.O. Box 85. Exec: Suburban Theatres, Inc. (M12-C612-D7)

Lenwood, Cal. BAR-LEN DR. Exec: P. K. Lyons. (M12-C400-D7)

Loma Linda, Cal. LOMA LINDA DR., Hwy. 99 at Richardson St. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C724-D7)

Long Beach, Cal. LAKEWOOD DR., Carson St. and Cherry Ave. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C950-D7)

Los Angeles, Cal. GAGE DR., 6801 E. Gage. Exec: Cal-Pac Drive-In Theatres, Inc., 143 S. Robertson, Los Angeles. (M12-C600-D7)

Los Angeles, Cal. GILMORE DR., Third St. and Fairfax Blvd. Exec: Sero Enterprises. (M12-C650-D7)

Los Angeles, Cal. LOS FELIZ DR., Hyperion Ave. and Riverside Drive. Exec: James Finkler. (M12-C500-D7)

Los Angeles, Cal. OLYMPIC DR., 12109 W. Olympic Blvd. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C775-D7)

Los Angeles, Cal. STUDIO DR., 5250 Sepulveda Blvd. Exec: LeVere Company. (M12-C700-D7)

Los Angeles, Cal. TWIN VU DR., Figueron and Redondo Blvds. Exec: E. Mathi. (M12-C550-D7)

Monrovia, Cal. BIG SKY DR., 1044 E. Huntington Drive. Exec: Lou Berman. (M12-C650-D7)

Oceanside, Cal. MIDWAY DR., Fall Brook Rd. Exec: Midway Enterprises, Floyd Bernard. (M12-C500-D7)

Ontario, Cal. VALLEY DR., Valley Blvd. Exec: Sero Enterprises. (M12-C860-D7)

Orange, Cal. ORANGE DR., Hwy. 101 and Placentia. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C788-D7)

Pico, Cal. WHITTIER DR., 8426 E. Whittier Blvd. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C600-D7)

Reseda, Cal. RESEDA DR., Reseda and Vanowen. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C740-D7)

Rialto, Cal. FOOTHILL AUTO TH., 655 E. Foothill Blvd. Exec: Mrs. L. C. Tharpe. (M12-C750-D7)

Riverside, Cal. RUBIDOUX DR., Opal and Mission Blvds. Exec: R. C. Hunt. (M12-C738-D7)

San Bernardino, Cal. MOUNT VERNON MOTOR IN, 632 Mt. Vernon. Exec: A. G. Mitzel. (M12-C600-D7)

San Diego, Cal. CAMPUS DR., 6147 El Cajon Blvd. Exec: Sam J. Russo. (M12-C600-D7)

San Diego, Cal. MIDWAY DR., 3901 Midway Drive. Exec: Midway Enterprises. (M12-C425-D7)

AN EXIT SPILLWAY to a side street is a distinct advantage and need not be elaborately dressed. Here at the MID-CITY, RACINE, WISC., traffic jams are avoided by the safety-marked exit.

San Diego, Cal. RANCHO DR., Federal Blvd. and Euclid. Exec: Sero Enterprises. (M12-C745-D7)

San Pedro, Cal. SAN PEDRO DR., 1575 N. Gaffey. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C900-D7)

Santa Ana, Cal. PAULO DR., 14361 Paularino. Exec: Ward Theatrical Ent. (M12-C800-D7)

Santa Maria, Cal. PARK-AIRE TH., P.O. Box 186. Exec: Victor S. Goss. (M12-C500-D7)

South Gate, Cal. SOUTHGATE DR., Firestone Blvd. and Atlantic. Exec: Julius F. Tuchler, 1151 N. Kingsley Dr., Los Angeles. (M12-C850-D7)

Van Nuys, Cal. VAN NUYS DR., Roscoe Blvd. at Sepulveda. Exec: Cal-Pac Drive-In Theatres, Inc. (M12-C891-D7)

Van Nuys, Cal. VICTORY DR., Victory at Coldwater. Exec: Sero Enterprises. (M12-C850-D7)

Ventura, Cal. 101 DR., Hwy. 101. Exec: Reeves Espy. (M12-C777-D7)

Nevada

Las Vegas, Nev. MOTOR VU DR., P.O. Box 1791. Exec: Associated Amusements, S. L. Gillette. (M8-C566-D7)

MEMPHIS TERRITORY

Alabama

Hamilton, Ala. DRIVE IN. Exec: J. H. Morrow (closed). (M*-C113-D*)

Arkansas

Benton, Ark. BIG FOUR DR. Exec: James Taylor Co. (UNC). (M9-C400-D7)

Blytheville, Ark. SKYLINE DR. Exec: W. B. Robertson (closed). (M*-C380-D*)

Blytheville, Ark. STARVUE DR. Exec: Warren Moxley. (M9-C450-D7)

Camden, Ark. CAMDEN DR., P.O. Box 5801. Exec: Carrolton Allman. (M9-C500-D7)

Conway, Ark. DRIVE IN. Exec: C. L. Junyor. (M8-C300-D7)

El Dorado, Ark. DRIVE IN, P. O. Box 1504. Exec: Busby-Jones Ct. (M8-C450-D7)

Forrest City, Ark. DRIVE IN. Exec: Montgomery and Priddy. (M10-C450-D7)

Fort Smith, Ark. SEVENTY-ONE DR., Jenny Lind Rd. and Hwy. 71. Exec: W. Spicer. (M8-C290-D7)

Fort Smith, Ark. TWENTY-TWO DR., Hwy. 22. Exec: Carl Burton. (M7-C600-D7)

Harrison, Ark. DRIVE IN. Exec: Commonwealth Amusement Co. (M8-C250-D7)

Hot Springs, Ark. 70 DR. Exec: James Taylor. (M10-C400-D7)

Hot Springs, Ark. WHEATLEY DR., Golf Links Rd. Exec: H. E. Wheatley. (M6-C200-D7)

Jonesboro, Ark. SKYVUE DR., 1804 S. Main St. Exec: Robert Lowry. (M10-C400-D7)

Little Rock, Ark. ASHER DR., Asher Ave., Hwy. 70. Exec: Robb and Rowley-United Ct. (M9-C650-D7)

Magnolia, Ark. JOY DR. Exec: Joy N. Houck, Joy Theatres Ct. (M9-C300-D7)

Magnolia, Ark. SUNSET DR. Exec: Robb and Rowley-United Ct. (M8-C500-D7)

Mena, Ark. MENA DR. Exec: Gordan and Longacre. (M8-C370-D7)

Newport, Ark. SKYLARK DR. Exec: Clifford Nicks. (M8-C300-D7)

North Little Rock, Ark. DRIVE IN, Hwy. 70. Exec: Barney Woolner, M. A. Lightman Ct. (M7-C500-D7)

Paragould, Ark. DRIVE IN. Exec: Orria Collins (UNC). (M8-C560-D7)

Pine Bluff, Ark. DRIVE IN. Exec: Bonner and Stringer (UNC). (M8-C500-D7)

Pine Bluff, Ark. DRIVE IN MOVIES, Hwy. 65. Exec: C. F. Bonner. (M7-C250-D7)

Pocahontas, Ark. SKYVUE DR. Exec: Burris and Henley Smith. (M8-C450-D7)

West Helena, Ark. 4th STREET DR. Exec: Ed Blair. (M10-C300-D7)

Kentucky

Benton, Ky. KENTUCKY LAKE DR. Exec: C. W. Lyles. (M9-C450-D7)

Mayfield, Ky. 45 DR. Exec: Ned Greene, Legion Theatre Co. (M8-C400-D7)

Mississippi

Corinth, Miss. SKYLARK DR. Exec: Frank Simmons, Jr. (M9-C550-D7)

Tupelo, Miss. 78 DR. Exec: J. M. Miller. (M9-C600-D7)

Missouri

Hayti, Mo. 61 DR. Exec: John Mohrstadt. (M9-C425-D7)

Tennessee

Dyersburg, Tenn. DRIVE IN. Exec: M. E. Rice, Brownsville, Tenn. (UNC). (M9-C450-D7)

Humboldt, Tenn. DRIVE IN. Exec: Rockwood Amuse. Co. (M9-C600-D7)

Jackson, Tenn. DRIVE IN, Hwy. 45. Exec: M. A. Lightman Ct. (M7-C300-D7)

Memphis, Tenn. LAMAR DR. Exec: Barney Woolner, M. A. Lightman Ct. (M10-C500-D7)

Memphis, Tenn. SKYVUE DR., 2855 Park Ave. Exec: Harold Roth, 944 Sterick Bldg. (M10-C750-D7)

Memphis, Tenn. SUMMER DR., 3150 Summer Ave. Exec: Kemmons Wilson and Louis Weaver. (M10-C670-D7)





RAISING THE SCREEN TOWER at the MID-CITY, RACINE, WISC., required two mobile cranes properly "dogged" to heavy supports. This method of screen tower construction permits fabrication and painting at ground level. It is then pulled up to position and bolted fast to the concrete base.

MILWAUKEE TERRITORY

Michigan

Rapid River, Mich. RAPID RIVER DR. Exec: W. A. Radloff and Frank Shivers. (M7-C450-D7)

Wisconsin

Appleton, Wis. 41 OUTDOOR TH. Exec: S. & M Theatres Ct. (M7-C750-D7)

Butler, Wis. VICTORY DR. Exec: E. J. Lipson, 952 W. State St., Milwaukee. (M7-C1000-D7)

Elm Grove, Wis. DRIVE IN, Bluemound Rd., P.O. Box 285. Exec: Phil Smith Ct., Boston, Mass. (M7-C650-D7)

Franklin, Wis. 41 OUTDOOR TH., Hwy. 41. Exec: L. F. Gran, Standard Theatres Ct., Milwaukee 3, Wis. (M7-C904-D7)

Green Bay, Wis. BADGER DR., Hwy. 54. Exec: S. A. Kuratz, Badger Outdoor Theatre Ct. (M7-C600-D7)

Green Bay, Wis. STARLIGHT DR. Exec: S. A. Kuratz, Badger Outdoor Thea. Ct. (M7-C600-D7)

Janesville, Wis. DRIVE IN, Hwy. 26. Exec: S. A. Kuratz, Badger Outdoor Thea. Ct. (M7-C450-D7)

Kenosha, Wis. KENO-FAMILY DR., Hwy. 42, Jct. T. Exec: C. J. Pappas. (M7-C500-D7)

Madison, Wis. BADGER OUTDOOR TH., Rt. 1. Exec: Ralph Green, J & M Enterprises, Inc. (M7-C650-D7)

Manitowoc, Wis. LAKEVIEW DR. Exec: Roger Reinert, Algoma, Wis. (M7-C400-D7)

Marinette, Wis. 64 OUTDOOR TH. Exec: S. A. Kuratz, Badger Outdoor Thea. Ct. (M7-C400-D7)

Neenah, Wis. 41 OUTDOOR TH. Exec: S & M Theatres Ct. (M7-C500-D7)

Oshkosh, Wis. 44 OUTDOOR TH. Exec: S & M Theatres Ct. (M7-C500-D7)

Racine, Wis. MID CITY OUTDOOR TH., Hwy. 42. Exec: L. F. Gran, Standard Theatres Ct., Milwaukee. (M7-C750-D7 plus 500 seats)

Racine, Wis. RACINE OUTDOOR TH. Exec: Ralph Green, J & M Enterprises, Inc. (M7-C500-D7)

Ripon, Wis. 44 OUTDOOR TH. Exec: S & M Theatres Ct. (UNC). (M7-C750-D7)

Sheboygan, Wis. STARDUSK DR. Exec: Sheldon Grenos. (M7-C450-D7)

Stevens Point, Wis. 51 OUTDOOR DR., Hwy. 51, 407 Division St. Exec: S. A. Kuratz, Badger Outdoor Theatre Ct. (M7-C450-D7)

Stevens Point, Wis. PARK DR., Rt. 1, Box 65. Exec: C. McLorky. (M7-C450-D7)

Wausau, Wis. MARATHON OUTDOOR TH., Hwy. 29. Exec: Sig Goldberg. (M7-C500-D7)

MINNEAPOLIS TERRITORY

Minnesota

Albert Lea, Minn. STARLIGHT DR. Exec: Albert Lea Amuse. Co. (M5-C375-D7)

Austin, Minn. AUSTIN DR. Exec: Austin Outdoor Theatre Co. (M5-C475-D7)

Backus, Minn. MARLOW'S MOBIL-IN TH. (Portable). Exec: John Rohr, Pine River. (M5-C* -D2)

Brainerd, Minn. GULL DR. Exec: Frank Manske. (M5-C400-D7)

Crosslake, Minn. MARLOW'S MOBIL-IN TH. (Portable). Exec: John Rohr, Pine River. (M5-C* D2)

Duluth, Minn. SKYLINE DR., Hwy. 53. Exec: Ted Mann, Rubenstein and Mann. (M5-C500-D7)

Little Falls, Minn. AIRPORT DR. Exec: Lowell B. Smoots. (M5-C350-D7)

Longville, Minn. MARLOW'S MOBIL-IN TH. (Portable). Exec: John Rohr, Pine River. (M5-C* -D2)

Mankato, Minn. KATO DR. Exec: Pete Karalis, Triangle Thea. Ct., 2408 Byrd Ave., N. Minneapolis. (M5-C380-D7)

Marshall, Minn. HILLER DR. Exec: Ray Hiller. (M5-C450-D7)

Minneapolis, Minn. BLOOMINGTON DR., 78th St. btw. Portland and Cedar Sts. Exec: Minneapolis Entertainment Enterprises, Inc. (M6-C650-D7)

Minneapolis, Minn. HILLTOP DR., 4711 Central Ave. N.E. Exec: Ed Sullivan. (M6-C500-D7)

Osseo, Minn. STARLITE DR. Exec: Minneapolis Entertainment Enterprises, Inc. (M6-C650-D7)

Owatonna, Minn. HWY. 65 DR., Hwy. 65. Exec: Frank and Woempner. (M5-C650-D7)

Pipestone, Minn. SUNSET DR. Exec: Al Lee, United Theatres. (M5-C381-D7)

Redwood Falls, Minn. 41 DR. Exec: Buckley and Buckley. (M5-C300-D7)

Rochester, Minn. OUTDOOR TH., Hwys. 14 and 52. Exec: Ralph Green, North State Enterprises, Inc. (M6-C550-D7)

Saint Cloud, Minn. SAINT CLOUD DR. Exec: Pete Karalis, Triangle Theatres Ct., 2408 Byrd Ave., N., Minneapolis. (M5-C380-D7)

Saint Paul, Minn. ROSE DR., North Snelling and Rd. C. Exec: Minneapolis Entertainment Enterprises, Inc. (M6-C600-D7)

South Saint Paul, Minn. CORRAL DR. Exec: Minneapolis Entertainment Enterprises, Inc. (M5-C650-D7)

Winona, Minn. SKY VU DR. Exec: Outdoor Enterprises, Inc. (M5-C500-D7)

Worthington, Minn. GAY DR. Exec: Harry Hower and Son. (M5-C412-D7)

North Dakota

Bismarck, N. D. CORRAL DR. Exec: Antone Schultz. (M5-C350-D7)

Fargo, N. D. STARLITE DR., 1900 13th St., N. Exec: Starlite Theatre of N. D., Inc. (M5-C500-D7)

Jamestown, N. D. LAKE ROAD DR. Exec: L. J. Ludwig. (M5-C300-D7)

Minot, N. D. MINOT DR. Exec: Pete Karalis, Triangle Thea. Ct., Minneapolis. (M5-C380-D7)

Williston, N. D. VALLEY DR. Exec: Arthur Kuhlman and Virgil Gould. (M6-C400-D7)

South Dakota

Aberdeen, S. D. STARLITE DR. Exec: Joe Floyd. (M5-C375-D7)

Huron, S. D. STARLITE DR. Exec: Huron Starlite Theatres. (M5-C400-D7)

Madison, S. D. MADISON DR. Exec: Gil Sessler and Duane Becker. (M5-C300-D7)

Mitchell, S. D. LAKEVIEW DR., P.O. Box 913. Exec: Bill Clark, Harry Noltheimer and S. Moro. (M5-C375-D7)

Sioux Falls, S. D. EAST PARK DR. Exec: H. E. Hanson. (M6-C325-D7)

Sioux Falls, S. D. SOO-DELL DR., Hwy. 77. Exec: Ed Paul (UNC). (M6-C200-D7)

Sioux Falls, S. D. STARLITE DR. Exec: Starlite Theatre Assoc. of S. D., Inc. (M6-C500-D7)

Watertown, S. D. EAST PARK DR. Exec: H. E. Hanson. (M5-C360-D7)

Wisconsin

Eau Claire, Wis. HIGHWAY 53 DR. Exec: Valley Outdoor Theatre Co. (M5-C500-D7)

La Crosse, Wis. STARLITE DR. Exec: S & M Theatres Ct. (M5-C420-D7)

NEW HAVEN TERRITORY

Connecticut

Danbury, Conn. DANBURY DR., P. O. Box 590. Exec: Lockwood and Gordon Ct., Boston, Mass. (M7-C431-D7)

East Haven, Conn. POST DR., Rt. 5. Exec: Philip Cahill. (M7-C712-D7)

Milford, Conn. MILFORD DR., Rt. 1. Exec: E. M. Loew Ct., Boston, Mass. (M7-C500-D7)

Montville, Conn. NORWICH-NEW LONDON DR. Exec: E. M. Loew Ct., Boston, Mass. (M7-C500-D7)

Newington, Conn. E. M. LOEW'S DR., Rt. 5. Exec: E. M. Loew Ct., Boston, Mass. (M7-C500-D7)

Newington, Conn. PIKE DR., Rt. 5. Exec: Joseph Dolgin. (M7-C350-D7)

North Haven, Conn. NEW HAVEN DR., Rt. 5. Exec: David Willig. (M6-C716-D7)

Waterbury, Conn. PINE DR. Exec: Joseph Dolgin. (M7-C350-D7)

Waterford, Conn. WATERFORD DR., P.O. RFD 2, Clark Lane, New London. Exec: Joe Gloth. (M7-C750-D7)

Winsted, Conn. PEOPLE'S DR. Exec: Vincent Youmatz. (M7-C300-D7)

NEW ORLEANS TERRITORY

Alabama

Andalusia, Ala. SKY VU DR. Exec: Martin Theatres Ct., Columbus, Ga. (M12-C226-D6)

Mobile, Ala. BAMA DR., Hwy. 90. Exec: L. C. Montgomery. (M12-C500-D7 plus 425 seats)

Prichard (Mobile), Ala. DRIVE IN, Hwy. 45. Exec: Paramount Gulf Thea. Ct. (M12-C500-D7)

Sanford, Ala. MIDWAY DR. Exec: J. E. Etheridge, W. Jackson and J. Dee. (M12-C* -D7)

Florida

Crestview, Fla. CRESTVIEW DR. Exec: John W. Bowers. (M12-C* -D7)

Crestview, Fla. PARK DR. Exec: J. C. Powell. (M9-C250-D6)

Niceville, Fla. BAY DR. Exec: Ward and Graham. (M12-C150-D7)

Pensacola, Fla. DRIVE IN, Hwy. 90. Exec: Paramount Gulf Theatres Ct. (M12-C500-D7)

Pensacola, Fla. PALAFOX DR. Exec: L. C. Montgomery. (M12-C400-D7)

Shalimar, Fla. DRIVE IN. Exec: James Tringas, Fort Walton, Fla. (M12-C300-D7 plus 200 seats)

Louisiana

Alexandria, La. FOX DR., Hwys. 76 and 20. Exec: Billy Fox Johnson. (M12-C480-D7)

Alexandria, La. JOY DR., Hwy. 71. Exec: Joy N. Houck, Joy Theatres Ct. (M12-C500-D7)

Amite, La. MIXON DR. Exec: Neil Mixon. (M9-C250-D7)

Arabi, La. SAINT BERNARD DR., P.O. Box 55, Saint Bernard's Hwy. Exec: George E. Wiltse. (M12-C396-D7)

Baton Rouge, La. DRIVE IN, P.O. Box 1904. Exec: Paramount Gulf Thea. Ct. (M12-C500-D7)

Baton Rouge, La. TIGER DR., By-Pass Hwy. 71. Exec: L. C. Montgomery. (M12-C350-D7)

Berwick, La. SAINT MARY DR., Hwy. 90. Exec: W. A. Lighter, Southenstern Theatres Ct. (M12-C350-D7)

Bogalusa, La. DRIVE IN, Exec: Nick Lamantia. (M12-C500-D7)

Bogalusa, La. JACK DR. Exec: Jack Minckler. (M12-C515-D7)

Covington, La. PARK DR. Exec: Salles Bros. (M12-C400-D7)

Crowley, La. TRAIL DR., Exec: A. J. Broussard. (M12-C325-D7)

Donaldsonville, La. DRIVE IN. Exexc: H. Cox. (M12-C300-D7)

Hammond, La. MITCHELL DR. Exec: J. T. Mitchell, P.O. Box 85. (M12-C250-D7)

Harvey, La. DRIVE IN. Exec: Willinm Shiell. (M12-C400-D7)

Jefferson Parish, La. MOVIES DR., 4100 Jefferson Hwy. Exec: B. Wollner, M. A. Lightman Ct. (M12-C548-D7)

Lafayette, La. HUB DR. Exec: Fred T. McLendon Theatre Ct. (M12-C400-D7)

Lafayette, La. LAFAYETTE DR., P.O. Box 182. Exec: Louis Michot. (M12-C300-D7)

Lake Charles, La. ROUND UP DR. Exec: Southern Amuse. Ct. (M12-C625-D7 plus 125 seats)

Marrero, La. DRIVE IN. Exec: Shiell and Connett. (M12-C340-D7)

Minden, La. HANDS DR., Hwy. 80. Exec: H. B. Hands. (M12-C500-D7)

Monroe, La. JOY DR. Exec: H. G. Trophit. (M12-C280-D7)

New Iberia, La. DRIVE IN. Hwy. 26. Exec: Louis Michot. (M12-C250-D7)

New Orleans, La. AIRLINE DR. Exec: Woolner Brothers. (M12-C800-D7)

New Orleans, La. JEFFERSON DR. Exec: Woolner Brothers. (M12-C600-D7)

Opelousas, La. YAM DR. Exec: Milton Guidry, Non Theatre, Lafayettee (UNC). (M12-C500-D7)

Ponchatoula, La. CAVE TANGEE DR., Hwy. 51. Exec: Dallas Woods. (M10-C300-D7)

Rayville, La. JOY DR. Exec: Joy N. Houck, Joy Theatres Ct. (M12-C450-D7)

Ruston, La. RUSTON DR. Exec: William Butterfield. (M12-C414-D7)

Shreveport, La. DRIVE IN. Exec: Joy N. Houck, Joy Theatres Ct. (M10-C400-D7)

Shreveport, La. JOY DR., Greenwood Rd. and Hwy. 80. Exec: Joy N. Houck, Joy Theatres Ct. (M12-C500-D7)

Shreveport, La. KINGS DR. Exec: E. L. Pack, Lone Star Theatres Ct. (M12-C600-D7)

West Monroe, La. STAR DR. Exec: H. G. Trophit. (M12-C300-D7)

Mississippi

Bay Saint Louis, Miss. DRIVE IN. Exec: Edward Ortte. (M12-C550-D7)

Biloxi, Miss. GULF COAST DR., Pass Rd. Exec: Edward Ortte. (M12-C650-D7)

Biloxi, Miss. BEACH DR. Exec: Landaiche and Houck, Joy Theatres Ct. (M12-C650-D7)

Brookhaven, Miss. 51 DR. Exec: A. L. Carruth, Brookhaven Amusement Co., Woolworth Bldg. (M12-C300-D6)

Greenwood, Miss. AIRPORT DR. Exec: W. A. Prewitt, Jr., Assoc. Theatres Ct. (M12-C300-D6)

Gulfport, Miss. CARVIEW DR. Exec: (*). (M12-C300-D7)

Hattiesburg, Miss. BEVERLY DR., 303½ - 10th Ave. Exec: H. Hargroder. (M12-C400-D6)

Jackson, Miss. 51 DR. Exec: Connett and McLendon. (M12-C485-D6)

Jackson, Miss. DRIVE IN. Hwy. 80, P.O. Box 1046. Exec: Paramount Gulf Theatres Ct. (M12-C400-D6)

Laurel, Miss. DRIVE IN, Hwy. 11. Exec: C. E. Jenner. (M12-C335-D6)

McComb, Miss. REN DR., Hwy. 24. Exec: R. E. Renfroe. (M12-C350-D7)

Meridian, Miss. MERIDIAN, Hwy. 81, P.O. RFD. 19. Exec: G. R. Moody. (M12-C300-D6)

Meridian, Miss. ROYAL DR. Exec: A. L. Royal. (M12-C400-D6)

Natchez, Miss. STARLITE DR. Exec: Charles Morel. (M12-C300-D6)

Pascagoula, Miss. CARVIEW DR. Exec: Campbell and Murphy. (M12-C350-D6)

Vicksburg, Miss. DRIVE IN. Exec: C. E. Jenner. (M12-C255-D6)

Yazoo City, Miss. IDLE HOUR DR., P.O. Box 154E, RR #2. Exec: F. M. Sigrest. (M12-C* -D6)

Texas

Texarkana, Tex. DRIVE IN, Hwy. 59. Exec: Joy N. Houck, Joy Theatres Ct. (M12-C500-D7)

Texarkana, Tex. JOY DR. Exec: Joy N. Houck, Joy Theatres Ct. (M12-C300-D7)

NEW YORK TERRITORY

New Jersey

Eatontown, N. J. EATONTOWN DR., Rt. 35. Exec: Walter Reade Ct., New York, N. Y. (M8-C1025-D7)

Farmingdale, N. J. FLY-IN DR., Rt. 34. Exec: E. I. Brown. (M8-C500-D7)

Farmingdale, N. J. SHORE DR., Rts. 33 and 34. Exec: J. J. Thompson, Eastern Drive-In Theatres Ct., New York, N. Y. (M7-C800-D7)

Morris Plains, N. J. DRIVE IN, Rt. 10. Exec: J. J. Thompson, Eastern Drive-In Theatres Ct., New York, N. Y. (M8-C600-D7)

New Brunswick, N. J. BRUNSWICK DR., Rt. 1. Exec: J. J. Thompson, Eastern Drive-In Theatres Ct., New York, N. Y. (M8-C600-D7)

Paramus, N. J. PARAMUS DR., Rt. 4. Exec: J. J. Thompson, Eastern Drive-In Theatres Ct., New York, N. Y. (M8-C800-D7)

Rutherford, N. J. DRIVE IN, Rt. S-3. Exec: Phil Smith Ct., Boston, Mass. (UNC). (M8-C1200-D7)

Saddle River, N. J. ROUTE 6 DR. Exec: Phil Smith Ct., Boston, Mass. (UNC). (M8-C1000-D7)

Toms River, N. J. TOMS RIVER DR., Rt. 37. Exec: Walter Reade Ct., New York, N. Y. (M8 C400-D7)

Totowa, N. J. TOTOWA DR., Rt. 6. Exec: J. J. Thompson, Eastern Drive-In Theatres Ct., New York, N. Y. (M8-C800-D7)

Trenton, N. J. LAWRENCE DR., Brunswick Pike, P.O. RFD #2. Exec: Walter Reade Ct., New York, N. Y. (M8-C850-D7)

Union, N. J. UNION DR., Rt. 29. Exec: J. J. Thompson, Eastern Drive-In Theatres Ct., New York, N. Y. (M8-C600-D7)

Woodbridge, N. J. DRIVE IN, P.O. Box 315. Exec: Walter Reade Ct., New York, N. Y. (M8-C850-D7)

New York

Bethpage, L. I., N. Y. BETHPAGE DR., Hempstead Turnpike. Exec: Paul Lerner. (M7-C600-D7)

Croton-on-Hudson, N. Y. STARLITE DR., Rt. 9. Exec: Murray Briskin. (M7-C750-D7)

Greenport, N. Y. DRIVE IN, 403 Main St. Exec: North Shore Features, Inc. (M7-C400-D7)

Kingston, N. Y. 9-W DR., Rt. 9W. Exec: Walter Reade Ct., New York, N. Y. (M8-C650-D7)

Kingston, N. Y. SUNSET DR. Exec: Harry Lamont, 100 State St., Albany 7. (M6-C650-D7)

Liberty, N. Y. MOUNTAIN DR., 12 Chestnut St. Exec: Dr. Luther Grant. (M8-C400-D7)

Massapequa, L. I., N. Y. MASAPEQUA DR. Exec: Zoo-Site Realty Corp. and Liggett-Florin (UNC). (M8-C600-D7)

Middletown, N. Y. MIDDLETOWN DR., Rt. 17. Exec: Harry Lamont, 100 State St., Albany 7. (M8-C300-D7)

New York (Bronx), N. Y. WHITESTONE BRIDGE DR., Bruckner Blvd. Exec: Michael Redstone. (M7-C* -D7)

Peekskill, N. Y. HOLLOW-BROOK DR., Oregon Rd. Exec: Nat Lapkin, Pres. Hollow Brook Drive-In Theatre Co. c/o Fabian Theatres Ct., 1501 B'way, New York. (M7-C* -D7)

Poughkeepsie, N. Y. OVERLOOK DR. Exec: Harry Lamont, 100 State St., Albany 7. (M6-C700-D7)

Staten Island, N. Y. NEW SPRINGVILLE DR. Exec: Fabian Theatres Ct. (M7-C650-D7)

Valley Stream, N. Y. SUNRISE H'WAY DR., Sunrise Hwy. Exec: Michael Redstone. (M8-C750-D7)

Warwick, N. Y. WARWICK DR. Exec: Chas. Finger and Geo. Miller. (M8-C* -D7)

OKLAHOMA CITY TERRITORY

Arkansas

DeQueen, Ark. DEQUEEN DR. Exec: Buster Smith. (M9-C200-D7)

Oklahoma

Ada, Okla. TOWER DR. Exec: Video Ind. Theatres, Inc. Ct., Oklahoma City. (M9-C400-D7)

Ardmore, Okla. TOWER DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City. (M9-C400-D7)

Bartlesville, Okla. HILL TOP DR., Hwy. 60. Exec: Video Ind. Theatres, Inc. Ct., Oklahoma City. (M9-C448-D7)

Chickasha, Okla. CHIEF DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City. (M9-C400-D7)

Clinton, Okla. CLINTON DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City. (M9-C400-D7)

Cushing, Okla. SUNDOWN DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City. (M9-C320-D7)

Duncan, Okla. DUNCAN DR., Hwy. 81. Exec: Video Ind. Theatres, Inc. Ct., Oklahoma City. (M9-C480-D7)

Elk City, Okla. 66 DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City. (M9-C400-D7)

El Reno, Okla. EL RENO DR. Exec: W. B. Shuttee. (M9-C500-D7)

Enid, Okla. ENID DR., Hwy. 81. Exec: Video Ind. Theatres, Inc. Ct., Okla. City. (M9-C618-D7)

Guymon, Okla. HI WAY 54 DR. Exec: Lewis Long. (M9-C430-D7)

Henryetta, Okla. HILL TOP DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City. (M9-C400-D7)

Lawton, Okla. AUSTIN DR., Hwy. 62. Exec: W. C. Austin. (M9-C600-D7)

Lawton, Okla. MOUNT SCOTT DR. Exec: Pearl Hair and Joe Martin. (M9-C329-D7)

Miami, Okla. TRI STATE DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City. (M9-C400-D7)

Norman, Okla. RIVERSIDE DR., Hwy. 9. Exec: E. A. Anderson. (M9-C400-D7)

Oklahoma City, Okla. CIRCLE DR. Exec: Harry Circle. (M9-C350-D7)

Oklahoma City, Okla. DEL CITY DR., E 29th St. Exec: Mrs. Lola Brewer. (M9-C400-D7)

Oklahoma City, Okla. NORTH WEST HIWAY DR., North West Hwy. Exec: O. F. Sullivan. (M9-C756-D7)

Oklahoma City, Okla. SEVENTY-SEVEN DR., Hwy. 77. Exec: Lewis Barton. (M9-C1000-D7)

Oklahoma City, Okla. SKYVIEW DR., E. 23rd St. Exec: Sam Caporal. (M9-C892-D7)

Oklahoma City, Okla. TINKER DR., S.W. 29th St. Exec: Lewis Barton. (M9-C700-D7)

Okmulgee, Okla. TOWER DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City. (M9-C400-D7)

Ponca City, Okla. SKYVUE DR., Hwy. 77. Exec: Video Ind. Theatres, Inc. Ct., Oklahoma City. (M9-C608-D7)

Poteau, Okla. Y DR. Exec: M. A. Harris. (M9-C300-D7)

Seminole, Okla. SKY WAY DR., Hwy. 270. Exec: Video Ind. Theatres, Inc. Ct., Oklahoma City. (M9-C475-D7)

Shawnee, Okla. STARLIGHT DR., Hwy. 18. Exec: Video Ind. Theatres, Inc. Ct., Okla. City. (M9-C483-D7)

Stillwater, Okla. MOONLITE DR. Exec: Video Ind. Theatres, Inc. Ct., Oklahoma City. (M9-C400-D7)

Tulsa, Okla. APACHE DR., Harvard and Apache Sts. Exec: L. E. Snyder. (M9-C300-D7)

Tulsa, Okla. RIVERSIDE DR., 71st So. Exec: Ralph Talbot. (M9-C600-D7)

Tulsa, Okla. SIXTY-SIX DR., Hwy. 66. Exec: Griffith Metropolitan Theatres Ct. (M9-C560-D7)

Tulsa, Okla. SKYLINE DR., Cincinnati St. Exec: Griffith Metropolitan Theatres Ct. (M9-C600-D7)

Texas

Borger, Tex. BUNAVISTA DR. Exec: W. F. W. Theatres. (M12-C400-D7)

Borger, Tex. PLAINS DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City, Okla. (M12-C400-D7)

Borger, Tex. TRI CITY DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City, Okla. (M12-C320-D7)

Dumas, Tex. PRAIRIE DR. Exec: H. S. McMurray. (M9-C400-D7)

Pampa, Tex. PAMPA DR. Exec: Video Ind. Theatres, Inc. Ct., Okla. City, Okla. (M9-C400-D7)

OMAHA TERRITORY

Iowa

Cherokee, Ia. CORRAL DR. Exec: Pioneer Ct., St. Louis Park, Minnesota. (M6-C350-D7)

Clarinda, Ia. CLARINDA DR. Exec: Herman Fields. (M6-C425-D7)

Council Bluffs, Ia. COUNCIL BLUFFS DR. Exec: Tri States Ct., Des Moines (UNC). (M6-C800-D7)

Harlan, Ia. HARLAN DR. Exec: Alfred Hnals. (M7-C300-D7)

Red Oak, Ia. DRIVE IN. Exec: Ed Hnal. (M7-C300-D7)

Sheldon, Ia. SHELDON DR. Exec: G. E. Sessler. (M6-C400-D7)

Sioux City, Ia. DRIVE IN, Hwy. 75. Exec: Tri States Ct., Des Moines. (M6-C700-D7)

Spirit Lake, Ia. SPIRIT LAKE DR. Exec: Phil March. (M7-C400-D7)

Nebraska

Bellevue, Neb. GRANDVIEW OUTDOOR TH. Exec: E. C. Petsch, Pleasantdale. (M7-C500-D7)

Fremont, Neb. FREMONT DR. Exec: Central States Ct., Des Moines, Ia. (M6-C450-D7)

Grand Island, Neb. GRAND ISLAND DR. Exec: Central States Ct., Des Moines, Ia. (M6-C550-D7)

Hastings, Neb. HASTINGS DR. Exec: Oscar Hanson, 1520 Davenport St., Omaha. (M6-C250-D7)

Lincoln, Neb. STAR VIEW OUTDOOR TH., Vine St. nr. 48th. Exec: I. Dubinsky. (M6-C600-D7)

Norfolk, Neb. DRIVE IN. Exec: Central States Ct., Des Moines, Ia. (M6-C350-D7)

Omaha, Neb. DRIVE IN, 79th and Dodge Sts. Exec: Tri States Ct., Des Moines, Ia. (M6-C650-D7)

York, Neb. PINES DR. Exec: Central States Ct., Des Moines, Ia. (M6-C300-D7)

South Dakota

Lennox, S. D. LENNOX DR. Exec: Arden G. Davidson. (M6-C250-D7)

Yankton, S. D. MOVIELAND DR. Exec: Max Slaughter. (M6-C500-D7)

Winner, S. D. SHOO-FLY DR. Exec: Don King (UNC). (M6-C* -D7)

PHILADELPHIA TERRITORY

Delaware

Delmar, Del. DELMAR DR., P.O. RD. 2, Hwy. 13. Exec: N. Rosen. (M8-C750-D7)

Fenton, Del. DIAMOND STATE DR. Exec: W. C. Evans, c/o Radio Station WDOV, Dover. (M8-C350-D7)

Wilmington, Del. BRANDYWINE DR., Hwy. 13, 921 Market St. Exec: M. Geller, M & S Amusement Ent., Inc. (M8-C550-D7)

New Jersey

Bridgeton, N. J. DRIVE IN. Exec: Mel Fox Theatres Ct., Philadelphia, Pa. (M8-C500-D7)

Burlington, N. J. FOX DR., Rt. 25. Exec: Mel Fox Thea. Ct., Phila., Pa. (UNC). (M8-C500-D7)

Camden, N. J. GARDEN STATE DR., Rt. 40. Exec: Varbalow Theatres Ct. (M8-C900-D7)

Gloucester Heights, N. J. STARLIGHT DR., Rt. 45 and Nicholson St. Exec: Mel Fox Theatres Ct., Philadelphia, Pa. (M8-C720-D7)

Pleasantville, N. J. DRIVE IN. Exec: Walter Reade Ct., New York, N. Y. (UNC). (M10-C1000-D7)

Vineland, N. J. DELSEA DR., Delsea Drive and Grand Ave. Exec: Mel Fox Theatres Ct., Philadelphia, Pa. (M8-C700-D7)

Pennsylvania

Alderson, Pa. HANSON DR., Harvey's Lake. Exec: Nat Straley. (M8-C250-D7)

Alderson, Pa. SANDY BEACH DR., Harvey's Lake. Exec: Sam Slomowitz, 189 Barney St., Wilkes-Barre, Pa. (M8-C400-D7)

Allentown, Pa. AIRPORT DR., Rt. 987. Exec: Max Korr and Rappaport. (M8-C650-D7)

Allentown, Pa. BOULEVARD DR., Union Blvd., Rt. 22. Exec: Milgrnm Theatres Ct., Philadelphia. (M8-C930-D7)

Bartonsville, Pa. POCONO DR., Rt. 611. Exec: (*). (M8-C560-D7)

Berlinsville, Pa. ROUTE 45 DR., Rt. 45. Exec: William Beck, Rt. 2. Walnutport, Pa. (M7-C400-D7)

Burnham, Pa. BURNHAM DR., Logan Blvd. Exec: S. H. Rothermel, Burnham Drive-In Theatre, Inc. (UNC). (M7-C500-D6)

Carbondale, Pa. MID-VALLEY DR. Exec: Luke Farrell. (M7-C900-D7)

Clifton Heights, Pa. FAMILY DR., 713 Baltimore Ave. Exec: Mel Fox Theatres Ct., Philadelphia. (M8-C700-D7)

Coatesville, Pa. COATESVILLE DR., Rt. 30. Exec: Milton Schlosberg (UNC). (M8-C500-D7)

Conshohocken, Pa. RIDGE PIKE DR., P.O. RD. 2. Exec: Wintner and O. J. Hickey. (M8-C950-D7)

Dallas, Pa. DALLAS DR. Exec: John M. Coon, 278 Union St., Luzerne, Pa. (M8-C850-D7)

Dickson City, Pa. CIRCLE DR., Rt. 6. Exec: Albert Frangell, 404 Main St. Simpson. (M8-C700-D7)

Douglasville, Pa. DRIVE IN, Rt. 422. Exec: Goldman Thea. Ct., Phila. (UNC). (M8-C800-D7)

Drums, Pa. HAZLETON DR., Rt. 309. Exec: Celeste Rossi, Jr., Beaver Meadows. (M8-C400-D7)

Dupont, Pa. COMERFORD DR., Dupont Hwy. Exec: Comerford Amuse. Co., Scranton. (M8-C900-D7)

Easton, Pa. EASTERN-MEDINA DR., Rt. 22. Exec: Eastern Medina Drive-In Theatres, Inc. (M8-C825-D7)

Eddystone, Pa. CHESTER PIKE DR., Rt. 13. Exec: Mel Fox Theatres Ct., Philadelphia. (M8-C950-D7)

Frackville, Pa. HI WAY DR., Rt. 122. Exec: Paul Kerrigan. (M8-C350-D7)

Freeland, Pa. POPULAR DR., Rt. 490. Exec: Jos. Lazo and G. Brudish, 87 S. Laurel St., Hazelton. (M8-C300-D7)

Gratz, Pa. DRIVE IN. Exec: Artz and Carl (UNC). (M8-C550-D7)

Harrisburg, Pa. DRIVE IN, 2 Miles North of City. Exec: Paul Kerrigan, Frackville (UNC). (M8-C800-D7)

Harrisburg, Pa. KEYSTONE DR., Rt. 422. Exec: Sam Chapman, 2906 Wilson Parkway. (M8-C650-D7)

Harrisburg, Pa. SILVER SPRING DR., Carlisle Pike—Rt. 11. Exec: R. J. Jones, Holly Theatre, Mt. Holly, Pa. (M8-C750-D7)

Hatfield, Pa. SPEEDWAY OPEN AIR TH. Exec: Duke Wilcox. (Sit in stands)

Hazleton, Pa. BRANDONVILLE DR., Rt. 924—Btw. Hazleton and Shenandoah. Exec: Melvin Heinbach. (M8-C300-D7)

Hazleton, Pa. LAUREL DR., McAdoo-Hazleton Hwy. Exec: Anthony Sacco, 32 First Ave. (UNC). (M8-C700-D7)

Hummels Wharf, Pa. NUWAY DR. Exec: M. L. Spiegelmeyer. (M8-C651-D7)

Lake Wallenpaupak, Pa. WHITE BEAUTY DR., Greentown, P.O. Exec: Richard and Leonard Guccini. (M5-C200-D7)

Lancaster, Pa. DRIVE IN. Lancaster-Manheim Rd. Exec: Sablosky Theatres Ct., Philadelphia. (M8-C700-D7)

Lancaster, Pa. SKYVUE DR., Rt. 30 East. Exec: Harry Chertcoff Theatres Ct. (UNC). (M8-C800-D7)

Langhorne, Pa. LINCOLN DR., Bensalem Twnshp. Exec: Neil Heilman, Fabian Theatres Ct. (M8-C900-D7)

Lebanon, Pa. DRIVE IN, Lebanon and Reading Hwy. Exec: Sam Chapman and Sablosky Theatres Ct. (UNC). (M8-C600-D7)

Lehighton, Pa. MAHONING DR., btw. Rts. 443 and 902. Exec: Max Korr. (M8-C500-D7)

Lewistown, Pa. LEWISTOWN DR. Exec: Irving Berney, c/o Pastime Theatre, Lewistown. (M8-C875-D6)

Lock Haven, Pa. DRIVE IN. Exec: Blatt Bros. Ct., Pittsburgh. (M8-C* -D7)

Milton, Pa. VETERAN FOREIGN WARS. Exec: American Legion (closed). (M*-C* -D*)

Montgomeryville, Pa. 309 DRIVE IN. Exec: Mel Fox Theatres Ct., Phila. (M8-C500-D7)

Mountain Top, Pa. SUNSET DR., Rt. 309. Exec: Vincent Novinski and Assoc. (M8-C200-D7)

Mount Carmel, Pa. NATALIE DR., Rt. 54. Exec: Max Korr. (M8-C600-D7)

Muncy, Pa. STARLITE DR., Rts. 202 and 14. Exec: Chester Darrin and Roy Brehm, Renova, Pa. (M8-C720-D7)

New Oxford, Pa. CROSS KEYS DR., Lincoln Hwy. W. of Cross Keys. Exec: R. L. McCool, DuBois. (M8-C* -D7)

Newton Lake, Pa. IDEAL DR., Rt. 70. Exec: James Cerra. (M8-C300-D7)

Orrtana, Pa. CALEDONIA PARK IN, Rt., 30. Exec: H. O. Bondurant (M8-C310-D7)

Philadelphia, Pa. SOUTH CITY DR., Broad St. and Pattison Ave. Exec: Charles Goldfine (M9-C1200-D7)

Pottsville, Pa. POTTSVILE DR., Rt. 122 Mill Creek Rd. Exec: G. S. Wolfe. (M8-C500-D6)

Schuylkill Haven, Pa. RENNINGER DR., Rt. 122. Exec: C. Swade and Murphy, 48 S. Lehigh, Frackville. (M8-C500-D6)

Stony Creek Mills, Pa. MOUNT PENN DR., Philadelphia Pike, P.O. R.D. 1. Exec: Jay Emanuel, Fabian Theartes Ct. (M8-C700-D5)

Tamaqua, Pa. VALLEY DRIVE, P.O. R.D. 2, Still Creek, Pa. Exec: Petrole Bros. (M8-C480-D7)

Temple, Pa. READING DR., Berkley Rd., Rt. 222, P.O. Box 408. Exec: Jay Emanuel, Fabian Theatres Ct. (M8-C744-D7)

Thomasville, Pa. LINCOLN DR., Rt. 30, R.D. 1 York Co. Exec: H. F. Halliwell, C. Smith, E. M. Thorne. (M8-C750-D6)

Tunkhannock, Pa. STARLITE DR., P. O. R.D. 3. Exec: Marvin Sands. (M7-C250-D6)

York, Pa. STONY BROOK DR., Rt. 30. Exec: Vernon Smith (M8-C800-D7)

Williamsport, Pa. LYCOMING DR. Exec: Paul Schaeffer (M8-C850-D7)

PITTSBURGH TERRITORY

Pennsylvania

Aliquippa, Pa. GREEN GARDEN OPEN AIR THEA., Hopewell Township. Exec: Peter L. Kulik. (M6-C350-D7)

Altoona, Pa. ALTOONA DR., Rt. 36. Exec: Earl R. Blatt, Blatt Bros. Theatres Ct., Pittsburgh. (M6-C700-D7)

Baden, Pa. ABC DR., Rt. 88. Exec: Phil Smith Ct., Boston, Mass. (M6-C600-D7)

Beaver Falls, Pa. HI WAY 51 DR., Rt. 51. Exec: J. Wincek (M6-C500-D7)

Beaver Falls, Pa. SPOTLIGHT 88 DR., Rt. 88. Exec: Ralph Felton (M8-C500-D7)

Bedford, Pa. DRIVE IN. Exec: Moonlite, Inc. (M8-C* -D7)

Belle Vernon, Pa. SUPER 71 DR. Rts. 71 and 711. Exec. Theodore Grance (M6-C700-D7)

Braddock, Pa. SUNDAY DR., Rt. 40. Exec: (*) (M6-C250-D6)

Bridgeville, Pa. EL RANCHO DR. Rt. 28. Exec: Romeo Chiappini, 800 Michigan Ave., Jeannette, Pa. (M6-C750-D7)

Butler, Pa. BUTLER DR., Rt. 68. Exec: A. B. Caldwell (M8-C350-D6)

Butler, Pa. GEIBELS DR., Rt. 68. Exec: J. Geibels (16mm.). (M6-C200-D6)

Carmichaels, Pa. CARMICHAELS DR., Rt. 88. Exec: L. Stuler. (M6-C350-D7)

Clarion, Pa. MIDWAY DR., Exec: Norbert Stern. (M7-C425-D7)

Claysville, Pa. SUNSET BEACH AUTO TH., Rt. 40. Exec: C. M. Ducray. (M8-C300-D7)

Coraopolis, Pa. KEN MAWR DR. Exec: Paul G. Trunnick (M8-C350-D7)

Conneaut Lake, Pa. LAKESIDE DR. Exec: Elmer Hazley, Joe Yaclah. (M6-C400-D7)



CONFECTION VENDING requires complete food handling facilities. This Berlo Vending Co. concession restaurant at the CHESTER PIKE, EDDYSTONE, PA., serves steak sandwiches and hot drinks in addition to normal items.

Cranberry, Pa. SKI HI DR., Rts. 322 and 257. Exec: Ray Woodard, Knyton Amuse. Ct., Montgomery, W. Va. (M6-C432-D7)

Du Bois, Pa. HI WAY DR. Exec: A. P. Way. (M7-C350-D7)

East McKeesport, Pa. MAPLE DR., Lincoln Hwy. Exec: Max Arnold and Jack Judd (M7-C850-D7)

Ellwood City, Pa. BLUE SKY DR., Zelienople Rd. Exec: J. Glorioso, J. Favorite. (M7-C450-D7)

Erie, Pa. SKYWAY DR., Rt. 5. Exec: Carl Guerrein. (M8-C550-D7)

Erie, Pa., STAR DR., 2515 W. 12th St., Rt. 5. Exec: J. Gold. (M8-C572-D7)

Fairchance, Pa. YORK RUN OPEN AIR TH., Rt. 119. Exec: Steve Danko. (M8-C300-D7)

Farrell, Pa. HICKORY DR., 636 New Castle Rd. Exec: (*). (M8-C* -D7)

Geistown, Pa. RICHLAND DR. Exec: Somerset Amuse. Co. (M7-C850-D7)

Grove City, Pa. LARKFIELD DR., Rt. 78. Exec: C. De Marsh. (M8-C350-D6)

Imperial, Pa. PENN LINCOLN DR., Rts. 22 and 30. Exec: Arthur Klixbull (M8-C350-D7)

Irwin, Pa. SUPER 30 DR., Rt. 30. Exec: Theodore Grance. (M6-C700-D7)

Kittanning, Pa. COMMUNITY DR., Rt. 422. Exec: Ernest Stern. (M6-C300-D7)

Latrobe, Pa. HI WAY DR., Rt. 30. Exec: John Ridilla. (M7-C400-D7)

Leechburg, Pa. WOODLAND DR., P.O. R.D. 1. Exec: Harold A. Lee. (M7-C200-D7)

Lemont Furnace, Pa. STAR LITE DR., Rt. 119. Exec: Ted Laskey. (M9-C600-D7)

McKeesport, Pa. RAINBOW GARDEN DR., Lincoln Way and Rt. 88, P. O. Box 526, R.D. 1. Exec: Joseph Volpe. (M6-C300-D7)

Meadville, Pa. AIRWAY DR., Rt. 19. Exec: Edward F. Dodge. (M6-C385-D7)

Mundys Corner, Pa. FAMILY DR., Rt. 22. Exec: K. A. Vaveris. (M7-C565-D7)

New Castle, Pa. SKYLINE DR., Rt. 224. Exec: Mitchell Kwiatkowski. (M7-C650-D7)

New Castle, Pa. SUPER CASTLE DR., Rt. 422. Exec. Theodore Grance. (M6-C760-D7)

New Kensington, Pa. FAMILY DR., Rt. 56, P.O. Box 1312. Exec: Henry Rolnick. (M6-C680-D7)

Pittsburgh, Pa. SILVERLAKE DR. Exec: Gabe Rubin. (M7-C500-D7)

Pittsburgh, Pa. SOUTH PARK DR., Rt. 88, 436 4th Ave. Exec: Norbert and Ernest Stern. (M8-C100-D7)

Saint Marys, Pa. FAIRVIEW DR., Rt. 255, P.O. Box 342. Exec: Joseph A. Farrell. (M6-C400-D7)

Scottdale, Pa. EVERGREEN DR., P.O. Box 71, Mt. Pleasant Rd., Exec: Donald J. Ruth. (M6-C300-D7)

Seward, Pa. LAUREL HILL DR., Rt. 56. Exec: Walter F. Litzinger (16mm.). (M6-C275-D7)

Sewickley, Pa. BROOKSIDE DR., Warrendale Rd. Exec: R. W. Thomson, Jr. (M6-C400-D7)

Sharon, Pa. HICKORY DR., Rt. 62. Exec: Chris Lampros. (M8-C650-D7)

Somerset, Pa. ROOF GARDEN DR. Exec: Andy Chakeres, Vogue Terrace, McKeesport, Pa. (M8-C* -D7)

Transfer, Pa. REYNOLDS DR., Greenville Rd., Rt. 18. Exec: Carl McKnight. (M6-C400-D7)

Turtle Creek, Pa. PITTSBURGH DR., Rt. 22. Exec: Ben Wachnansy. (M7-C850-D7)

Uniontown, Pa. SMELL DR., Rt. 21, McClellandtown Rd. Exec: M. V. Smell (16mm.). (M6-C250-D7)

Warren, Pa. WHITE WAY DR., Rt. 6. Exec: Ben White. (M7-C350-D7)

Washington, Pa. ROUTE 19 DR., Rt. 19. Exec: Bill Basle. (M7-C500-D7)

Waterford, Pa. SUNSET DR., Rt. 97. Exec: R. Woodard. (M6-C350-D7)

West Brownsville, Pa. CUPPIES DR., Rt. 40. Exec: J. K. Kaupp. (M6-C465-D7)

Wexford, Pa. STARLITE DR. Exec: J. H. B. Enterprises. (M7-C1000-D7)

West Virginia

Clarksburg, W. Va. SPEEDWAY DR. Exec: Lonnie L. Ash. (M8-C200-D7)

Clarksburg, W. Va. WARNER SKYLINE DR., Rt. 19. Exec: C. A. Warner. (M6-C400-D7)

Elkins, W. Va. ELKINS DR., Rt. 33. Exec: Bretsel Land and Harold Talbott. (M6-C250-D7)

Fairmont, W. Va. HARMONY DR. Exec: E. C. Wilson. (M6-C* -D7)

Fairmont, W. Va. TWILIGHT DR. Exec: Theodore Reynolds, R. Hall, B. Artman. (M8-C500-D7)

Fairmont, W. Va., STARLIGHT DR. Exec: Laskey Bros. (M8-C500-D7)

Grafton, W. Va. GRAFTON DR. Exec: Grafton Coal Co. (M8-C250-D7)

Meadowbrook, W. Va. SUNSET DR., Rt. 19. Exec: Alex Silay. (M8-C400-D7)

Metz, W. Va. WILSON DR., Rt. 250. Exec: E. C. Wilson (16mm.). (M6-C150-D7)

Morgantown, W. Va. BUNKER HILL DR., Fairmont Rd., Rt. 19. Exec: Orville Pauley. (M6-C125-D7)

Morgantown, W. Va. STARLITE DR. Exec: (*) (16mm.). (M7-C* -D7)

Morgantown, W. Va. TOWN AND COUNTRY DR., Cheat Canyon Park. Exec: Wm. Coburn. (M7-C200-D7)

New Martinsville, W. Va. WORK DR. Exec: Jimmy Work. (M6-C400-D7)

Phillipi, W. Va. SKYVIEW DR. Exec: Alex Silay and Steve Medve. (M6-C400-D7)

Steelton, W. Va. CLEGGS SUPER SKYWAY DR. Exec: Howard Clegg. (M6-C250-D7)

Uffington, W. Va. RIDGEDALE DR. Exec: R. F. Hanson, J. B. McDonald. (M6-C90-D7)

Wheeling, W. Va. GROVE DR., Elm Grove. Exec: Grove Drive-in Theatre Corp. (M7-C50-D7)

Wierton, W. Va. BELLE-AIR DR. Exec: Jos. and Mary Yacos. (M7-C450-D7)

PORTLAND TERRITORY

Oregon

Albany, Ore. MIDWAY DR. Exec: Charles Whiteside and Art Adamson. (M9-C400-D7)

Beaverton, Ore. CANYON DR. Exec: J. T. Shiefield and Art Adamson. (M9-C500-D7)

Eugene, Ore. EUGENE DR., 2860 S. Willamette. Exec: William R. Forman, Ted Gamble Ct. M9-C580-D7)

Hermiston, Ore. HERMISTON DR. Exec: L. A. Moore. (M8-C480-D7)

Medford, Ore. VALLEY DR. Exec: A. Smith and Gaylord, Valley Drive-in Theatre Co. (M8-C450-D7)

Medford, Ore. STARLIGHT DR. Exec: Robt. L. Lippert Theatres Ct. (M8-C600-D7)

Oak Grove, Ore. DRIVE IN, McLoughlin Blvd. Exec: Ampitheatres, Inc. (M8-C900-D7)

Pendleton, Ore. PENDLETON MOTOR IN, Rt. 1, P.O. Box 145A. Exec: Ray Steveson and Anderson. (M8-C300-D7)

Portland, Ore. AMPHITHEATRE DR., 9727 N.E. Union Ave. Exec: B. R. Keller and Phil Polsky. (M9-C500-D7)

Portland, Ore. 82nd STREET DR., 9600 S.E. 82nd St. Exec: William R. Forman, Ted Gamble Ct. (M9-C732-D7)

Portland, Ore. LAURELHURST DR. Exec: W. E. Tebbetts. (M9-C*-D7)

Salem, Ore. SALEM DR., Rt. 3. Exec: William R. Forman and Ted Gamble. (M8-C490-D7)

Washington

Longview, Wash. YOUR DR. Exec: Dr. G. H. Mathis. (M9-C300-D7)

ST. LOUIS TERRITORY

Illinois

Alton, Ill. STARLIGHT DR. Exec: Joe Goldfarb, Harry Beck. (M9-C875-D7)

Bellville, Ill. SKYVIEW DR. Exec: Bloomer Amusement Co. (M8-C750-D7)

Bridgeport, Ill. DRIVE-IN. Exec: Frisina Amuse. Co., Springfield (UNC). (M9-C750-D7)

Brussels, Ill. BRUSSELS DR. Exec: Chamber of Commerce. (M8-C100-D5)

Cairo, Ill. EL PATIO DR. Exec: Harry Young and Fred Sullivan. (M9-C450-D7)

Carbondale, Ill. WARING AUTO DR., Rt. 13. Exec: W. E. Waring, Jr., c/o Ritz Theatre, Cobden, Ill. (M10-C500-D7)

Carmi, Ill. CARMI DR., Rt. 460. Exec: Herbert W. Newcomb (UNC). (M9-C500-D7)

Centralia, Ill. CENTRALIA DR., Rt. 16, P.O. Box 47. Exec: Homer S. Butler, Jr. (M9-C540-D7)

Charleston, Ill. CHARLESTON DR., Rt. 16. Exec: Ed Clark and J. Brand, Mattoon, Ill. (UNC). (M9-C500-D7)

Collinsville, Ill. MOUNDS DR. Exec: Louis Jablonow, Jablonow-Komm Theatres, Peerless Theatre, St. Louis 15, Mo. (M9-C1000-D7)

East Alton, Ill. ALTWOOD DR., Old St. Louis Rd., Wood River P.O. Exec: Alton Amuse. Corp., Dubinsky Bros., P.O. Box 745, St. Joseph, Mo. (M9-C800-D7)

East St. Louis, Ill. DRIVE IN, P.O. R.R. 50, Rt. 159, French Village, Exec: Publix Theatres, Inc. c/o I. Wienshienk, Grand Theatre, Alton, Ill. (M9-C500-D7)

Effingham, Ill. EFFINGHAM DR., U. S. Rt. 40, Exec: Frisina Amuse. Ct., Springfield. (M9-C750-D7)

Flora, Ill. RENDEZVOUS DR., Rt. 45, P. O. Box 92. Exec: Jones Enterprises, Inc., Jones Materials Co., Lawrenceville. (M8-C500-D7)

Herrin, Ill. EGYPTIAN DR., Rt. 148. Exec: Harold Grear. (M8-C500-D7)

Herrin, Ill. MARLOW'S DR., Rt. 148. Exec: John Marlow. (M9-C800-D7)

Highland, Ill. AIR PARK, Rt. 40. Exec: Joseph Schremp. (M8-C400-D7)

Hillsboro, Ill. HILLSBORO DR., Butler Y Junction. Exec: Elbert W. Butler. (M9-C480-D7)

Jacksonville, Ill. JACKSONVILLE DR., Rt. 63. Exec: Elmore Suter. (M9-C500-D7)

Lawrenceville, Ill. LAWRENCEVILLE DR. Exec: Frisina Amuse. Ct., Springfield (UNC). (M9-C750-D7)

Litchfield, Ill. LITCHFIELD DR. Exec: Frisina Amuse. Ct., Springfield. (M9-C750-D7)

Lovington, Ill. LOVINGTON DR. Exec: L. B. Hettinger. (M9-C400-D7)

Mattoon, Ill. SKYWAY DR. Exec: R. O'Keefe, Danville. (M9-C600-D7)

Metropolis, Ill. EL CAPITAN DR. Exec: M. A. Lightman Ct., Memphis, Tenn. (M9-C600-D7)

Mount Olive, Ill. MOUNT OLIVE DR., Rt. 66. Exec: Louis Odorozzi, Staunton. (M9-C400-D7)

Mt. Vernon, Ill. MT. VERNON DR., Rt. 148. Exec: Frank Glenn, Tamaroa. (M9-C450-D7)

Olney, Ill. DRIVE IN. Exec: Frisina Amuse. Ct., Springfield. (M9-C750-D7)

Olney, Ill. OLNEY DR., Hwy. 50. Exec: H. E. Coen & Robert Hill. (M9-C500-D7)

Pana, Ill. TANNER DR. Exec: Tanner Drive-In Theatre Corp. (UNC). (M9-C500-D7)

Pankeyville, Ill. HARRISBURG DR. Exec: Olen J. Ingram. Harrisburg. (M9-C500-D7)

Paris, Ill. TWIN LAKES DR., No. Main St., Rt. 1. Exec: Oral Pierson and F. B. Youndblood. (M9-C500-D7)

Robinson, Ill. GORDON DR., Gordon Junction. Exec: Frisina Amuse. Ct., Springfield. (M9-C500-D7)

Sandoval, Ill. HOLLYWOOD DR., Hwy. 50. Exec: Rollen R. Robinson. (M9-C350-D7)

Sharpsburg-Taylorville, Ill. DRIVE-IN. Exec: Frisina Amuse. Ct., Springfield (UNC). (M9-C750-D7)

Springfield, Ill. DRIVE-IN. Exec: Frisina Amuse. Ct. (UNC). (M9-C750-D7)

Springfield, Ill. SPRINGFIELD DR., Hwy. 66 and 29. Exec: J. N. Sikes. (M9-C900-D7)

Tamaroa, Ill. MELODY DR., Hwy. 51. Exec: Frank J. Glenn. (M9-C300-D7)

Vandalia, Ill. DRIVE-IN. Exec: Tanner Drive-In Then. Corp., Punn (UNC). (M9-C500-D7)

West Frankford, Ill. MIDWAY DR., Benton Rd. Exec: Robert Strauss and Joe Sullivan, Benton, Ill. (UNC). (M8-C400-D7)

West Frankford, Ill. WEST FRANKFORT DR. Exec: I. A. (Jack) Palmer and Guy Minton (UNC). (M5-C500-D7)

Indiana

Mt. Vernon, Ind. MT. VERNON DR. Exec: Thomas Baldwin. I. H. Leffel. (M8-C300-D7)

Iowa

Keokuk, Ia. DRIVE IN. Exec: Andy Dietz and Assoc., 3142 Olive St., St. Louis, Mo. (UNC). (M8-C500-D7)

Keokuk, Ill. DRIVE IN. Exec: Frisina Amuse. Ct., Springfield, Ill. (UNC). (M8-C750-D7)

Kentucky

Benton, Ky. KENTUCKY LAKES DR. Exec: J. W. Lyles. (M8-C500-D7)

Kevil, Ky. PARK DR., Rt. 1. Exec: F. O. Shelby. (M8-C200-D7)

Murray, Ky. MURRAY DR. Exec: Leo Keiler, Columbia Amuse. Co., Paducah (UNC). (M9-C500-D7)

Paducah, Ky. PADUCAH DR. Exec: Leo Keiler, Columbia Amuse. Co. (M9-C1000-D7)

Paducah, Ky. STARLITE DR., New Benton Rd. Exec: Lake Edwards. (M9-C500-D7)

Missouri

Affton, Mo. DRIVE IN. Exec: St. Louis Amuse. Ct. (UNC). (M8-C1000-D7)

Affton, Mo. RONNIES DR., Baptist Church Lane and Lindbergh Drive. Exec: Fred Wehrenberg Ct., St. Louis. (M8-C800-D7)

Cape Girardeau, Mo. CAPE DR., Rt. 61., Illmo P.O. Exec: Carl Milne, Howard Bates. (M8-C400-D7)

Columbia, Mo. COLUMBIA DR., 1100 block Broadway. Exec: Commonwealth Amuse. Ct. (UNC). (M8-C500-D7)

Des Peres, Mo. DRIVE IN. Hwy. 50. Exec: Phil Smith Ct., Boston, Mass. (M8-C500-D7)

Farmington, Mo. CORRAL DR. Exec: Tom Edwards, Edwards and Plumlee Ct. (M8-C500-D7)

Festus, Mo. DRIVE IN. Exec: Tilden Dickson, Harry Miller, W. A. Collins, c/o Miller Theatre, Festus (UNC). (M8-C600-D7)

Hannibal, Mo. DRIVE IN. Exec: Frisina Amuse. Ct., Springfield, Ill. (UNC). (M8-C750-D7)

Kennett, Mo. TOMMIE'S DR. Exec: H. E. Boyd. (M8-C450-D7)

Kirkwood, Mo. DRIVE IN, 643 Cleveland St. Exec: (*). (8-C* -D7)

Lebanon, Mo. LEBANON DR., Rt. 32. Exec: Ralph Hough. (M8-C200-D7)

Mexico, Mo. DRIVE IN. Exec: Frisina Amuse. Ct., Springfield, Ill. (UNC). (M8-C750-D7)

Mexico, Mo. LITTLE DIXIE DR. Exec: Andy Dietz and Assoc. (M8-C500-D7)

Overland (St. Louis 14), Mo. AIRWAY DR., St. Charles Rd. Exec: Phil Smith Ct., Boston, Mass. (M8-C1000-D7)

Overland (St. Louis 14), Mo. DRIVE IN, Page and Woodson Rd. Exec: St. Louis Amuse. Ct. (UNC). (M8-C1000-D7)

Perryville, Mo. DRIVE IN. Exec: F. H. Mercier, c/o Mercier Theatre (UNC). (M8-C500-D7)

Perryville, Mo. HILL TOP DR., Rt. 25. Exec: Elmer Donze, St. Genevieve. (M8-C285-D7)

Poplar Bluff, Mo. POPLAR BLUFF DR., Rt. 67. Exec: Clyde Hogg and Clyde Richardson. (M8-C500-D7)

Rolla, Mo. ROLLA DR., Hwy. 66. Exec: R. E. Carney Theatres. (M8-C750-D7)

St. Louis Co., Mo. NORTH DR., Hwy. 99 and St. Cyr Rd. Exec: C. H. Kaiman, 4106 W. Florissant Ave., St. Louis. (M8-C1000-D7)

St. Louis Co., Mo. 66 PARK IN, Hwy. 66 and Sappington Rd. Exec: Fred Wehrenberg Ct. (M8-C800-D7)

Shelbina, Mo. DRIVE IN. Exec: Frisina Amuse. Ct., Springfield, Ill. (UNC). (M8-C750-D7)

Sikeston, Mo. DELTA DR. Exec: Miss Geraldine Twitty. (M9-C225-D7)

Sikeston, Mo. SIKESTON DR. Exec: O. W. McCutcheon. (M9-C450-D7)

West Quincy, Mo. QUINCY DR. Exec: Dr. Eugene Brezany, 3515 St. Louis Ave., St. Louis 6. (M8-C830-D7)

SALT LAKE CITY TERRITORY

Idaho

Blackfoot, Ida. MOTOR VUE TH. Exec: Albert Barrott and Oscar Paisley. (M6-C500-D7)

Boise, Ida. BOISE DR. Exec: J. W. Naylor. (M6-C300-D7)

Burley, Ida. ALFRESCO DR., 2 miles No. of Burley. Exec: I. H. Harris, Haris-Voeller Theatres Ct. (M6-C350-D7)

Caldwell, Ida. SKYLITE DR. Exec: J. K. Knuth. (M6-C250-D7)

Coeur D'Alene, Ida. SHOWBOAT DR. Exec: Oscar Paisley. (M6-C400-D7)

Idaho Falls, Ida. MOTOR VU DR., Yellowstone Hwy. No. 191. Exec: J. H. Moran, c/o Royal Theatre, Laurel, Mont. (M6-C550-D7)

Jerome, Ida. AUTO TH. Exec: R. L. Trathen, 251 E. Second, S., Salt Lake City 1, Utah (M6-C210-D7)

Meridian, Ida. HIGHWAY 30 DR. Exec: R. L. Trathen, 251 E. Second, S, Salt Lake City 1, Utah. (M6-C400-D7)

Montpelier, Ida. MOTOR VU DR. Exec: Russ Dauterman, 1800 Harrison Ave., Salt Lake City 5, Utah. (M6-C250-D7)

Nampa, Ida. NAMPA-CALDWELL DR. Exec: Northwest Theatres, Meridian. M6-C350-D7)

Payette, Ida. PAY-OUT DR. Exec: Rex Voeller, Ontario, Ore. (M6-C400-D7)

Pocatello, Ida. PACATELLO DR., Hwy. 91. Exec: Tulles Bros. (M6-C250-D7)

Rupert, Ida. FAMILY DR. Exec: Burgess Crandall. (M6-C100-D7)

Twin Falls, Ida. MOTOR VU DR. Kimberley Rd. Exec: R. L. Trathen, 251 E. Second, S, Salt Lake City 1, Utah. (M6-C560-D-7)

Montana

Billings, Mont. MOTOR VU DR. Exec: J. H. Moran, c/o Royal Theatre, Laurel. (M6-C650-D7)

Bozeman, Mont. STARLIGHT DR. Exec: Bozeman Starlight Drive-In, Inc. (M6-C*-D7)

Great Falls, Mont. MOTOR VU DR. Exec: Associated Amuse. Ct., Salt Lake City, Utah. (M6-C500-D7)

Helena, Mont. SUNSET DR. Exec: E. R. Munger. (M6-C500-D7)

Miles City, Mont. SUNSET DR. Exec: J. Holmes and Wm. Fowers, Missoula. (M6-C300-D7)

Missoula, Mont. MOTOR VU DR. Exec: B. J. Barrett. (M6-C400-D7)

Missoula, Mont. STATE DR. Exec: Wm. Fowers. (M6-C300-D7)

Utah

Bountiful, U. BOUNTIFUL MOTOR VIEW DR., Hwy. 91. Exec: J. N. Bills. (M6-C650-D7)

Brigham City, U. AUTO-VU DR. Exec: George Greghead, Salt Lake City. (M6-C200-D7)

Logan, U. LOGAN DR., Hwy. 91. Exec: Elmer Brown. (M6-C300-D7)

Ogden, U. MOUNT OGDEN DR., 3700 Wall Ave. Exec: Stephens Bros., 1220 Binford St. (M6-C300-D7)

Ogden, U. WEBER MOTOR VU DR., Rt. 4. Exec: Associated Amuse. Ct., Salt Lake City. (M6-C785-D7)

Orem, U. GENEVA DR., Hwy. 91. Exec: Veigh Cummings, Provo. (M6-C624-D7)

Price U. SUNSET DR. Exec: Billy R. Webb. (M6-C300-D7)

Provo, U. PIONEER DR. Exec: Associated Amuse. Ct., Salt Lake City. (M6-C600-D7)

Roy, U. RIVERDALE DR. Exec: R. Tulles and J. Naylor. (M6-C400-D7)

St. George, U. DIXIE MOTOR-VU DR. Exec: Hal Hawk, Hawk Theatres, 240 S. Second, E., Salt Lake City. (M8-C500-D7)

Salt Lake City, U. AIRPORT DR., 2700 W. North Temple. Exec: Ray F. Wilmart (M6-C300-D7)

Salt Lake City, U. AUDITORIUM DR., 2nd West and 21st South. Exec: Frank Jenkins. (M6-C500-D7)

Salt Lake City, U. HYLAND DR., 3670 Highland Dr. Exec: Mel Smart. (M6-C600-D7)

Salt Lake City, U. MOTOR VU DR., 35th and 33rd South. Exec: Erick Peterson. (M6-C700-D7)

Salt Lake City, U. OZONER DR. Exec: (*). (M6-C* -D7)

Salt Lake City, U. REDWOOD DR. Exec: Mel Smart. (M6-C500-D7)

Salt Lake City, U. SUNDOWN DR. Exec: Kirkpatrick Bros. (UNC). (M6-C300-D7)

Salt Lake City, U. WOODLAND DR. Exec: Associated Amuse. Ct. (M6-C300-D7)

Wyoming

Evanston, Wyo. MOTOR-VU DR. Exec: Russ Dauterman, 1800 Harrison Ave., Salt Lake City 5, Utah. (M6-C250-D7)

SAN FRANCISCO TERRITORY

California

Antioch, Cal. STAMM DR. Exec: F. Stamm and Son. (M12-C* -D7)

Armona, Cal. KINGS DR. Exec: W. Paddock and J. E. Meisner. (M12-C500-D7)

Belmont, Cal. STARLITE DR., Harbor Blvd. Exec: Trans-Calif. Theatres Ct. (M12-C732-D7)

Boulder Creek, Cal. STARVIEW DR., Big Basin Hwy. Exec: Trans-Calif. Theatres Ct. (M12-C300-D7)

Ceres, Cal. AUTO MOVIES. Exec: Frank Lucido Ct. (M12-C380-D7)

Chico, Cal. CHICO DR. Exec: Joe Blumenfeld, Blumenfeld Enterprises Ct. (M12-C525-D7)

Chico, Cal. STARLITE DR. Exec: Michael Naify, T. and D. Jr. Enterprises Ct. (M12-C650-D7)

Colma, Cal. EL RANCHO DR. Exec: Robert L. Lippert Ct. (M12-C840-D7)

Concord, Cal. CONTRA COSTA MOTOR IN, 2040 Contra Costa Hwy. Exec: Robert L. Lippert Ct. (M12-C600-D7)

Cotati, Cal. REDWOOD DR., Hwy. 101. Exec: Guy Meek Ct. (M12-C500-D7)

El Cerrito, Cal. MOTOR MOVIES, San Pablo Ave. and Fairmont. Exec: Joe Blumenfeld Enterprises Ct. (M12-C650-D7)

Fresno, Cal. STARLITE DR. Exec: Robert L. Lippert Ct. (M12-C600-D7)

Gilroy, Cal. HECKER PASS DR. Exec: Fletcher and Balenesi. (M12-C450-D7)

Hayward, Cal. MOTOR MOVIES, Tennyson Rd. Exec: Gordon Allen. (M12-C600-D7)

Keyes, Cal. STARLITE DR. Exec: Robert L. Lippert Ct. (M12-C600-D7)

Lodi, Cal. MIDWAY DR. Exec: Frank Lucido Ct. (M12-C380-D7)

Lodi, Cal. SUNSET DR. Exec: Michael Naify, T. and D., Jr. Enterprises Ct. (M12-C1000-D7)

Madera, Cal. EL RIO DR. Exec: V. Precindo. (M12-C420-D7)

Malaga, Cal. MOTOR IN, Hwy. 99, 2049 Adoline St. Exec: Robert L. Lippert Ct. (M12-C900-D7)

Merced, Cal. STARLITE DR. Exec: Michael Naify, T. and D., Jr. Enterprises Ct. (M12-C* -D7)

Merced, Cal. TIOGA DR. Exec: Frank Lucido Ct. (M12-C525-D7)

Monterey, Cal. PARK DR. Exec: Michael Naify, T. and D. Jr. Enterprises Ct. (M12-C466-D7)

Napa, Cal. KAY VON DR. Exec: Wm. Fowers and B. Quinn. (M12-C440-D7)

North Sacramento, Cal. NORTH SACRAMENTO DR. Exec: Joe Blumenfeld Enterprises Ct. (M12-C765-D7)

Oakland, Ca. AIRPORT AUTO MOVIES. Exec: Frank Lucido Ct. (M12-C850-D7)

Oroville, Cal. MESA DR. P.O. Box 1310. Exec: George Hickox and Newell C. Post. (M12-C* -D7)

Palo Alto, Cal. PENINSULA DR., Bayshore Hwy. and Amarillo Rd. Exec: Guy Meek Ct. (M12-C450-D7)

Placerville, Cal. SE RANCHO DR. Exec: Lawrence Freitas and Victor Banta. (M12-C460-D7)

Pittsburgh, Cal. AUTO MOVIES, Old Antioch Rd., P.O. Box 1271. Exec: Frank Lucido Ct. (M12-C525-D7 plus 400 seats)

Redding, Cal. STARLITE DR. Exec: Arthur Epsy. (M12-C* -D7)

Roseville, Cal. ROSEVILLE, DR. Exec: General Theatre Co. (UNC). (M12-C250-D7)

Salida, Cal. MODESTO MOTOR IN, Hwy. 99. Exec: Robert L. Lippert Ct. (M12-C443-D7)

Salinas, Cal. AUTO MOVIES, East Market and Simas Sts. Exec: Frank Lucido Ct. (M12-C500-D7)

Salinas, Cal. SKYVIEW DR., Sanborn Dr. Exec: Antone Martines. (M12-C650-D7)

San Jose, Cal. MOONLIGHT MOVIES. Exec: Michael Naify, T. and D. Jr. Enterprises Ct. (M12-C1000-D7)

San Jose, Cal. SAN JOSE DR. Gish Rd. and Oakland, Hwy. 17. Exec: Guy Meek. (M12-C600-D7)

San Leandro, Cal. OAKLAND DR., 15065 E. 14th St. Exec: Guy Meek Ct. (M12-C713-D7)

San Leandro, Cal. STADIUM AUTO MOVIES. Exec: Michael Naify, T. and D. Jr. Enterprises Ct. (M12-C826-D7)

San Rafael, Cal. MARIN MOTOR MOVIES, San Quentin Rd. Exec: Joe Blumenfeld, Blumenfeld Enterprise Ct. (M12-C500-D7)



THEATRICAL FLASH OF A DOWN-TOWN FIRST-RUN marks some of the newer drive-ins. Here at the 675 car GILMORE, LOS ANGELES, CAL., owners Sero Enterprises have taken advantage of a dominant corner position in order to accomplish a dramatic facade. Architect was William Glenn Balch.

Santa Cruz, Cal. ENCINA DR. Exec: Trans-Calif. Theatres Ct. (M12-C400-D7)

South San Francisco, Cal. STARLITE DR. 30 S. Linden Ave. Exec: Trans-Calif. Theatres Ct. (M12-C850-D7)

Stateline, Cal. TAHOE DR., Hwy. 40. Exec: William Garren. (M6-C300-D7)

Stockton, Cal. 99 DR. Exec: Michael Naify, T. and D., Jr. Enterprises Ct. (M12-C600-D7)

Stockton, Cal. STOCKTON MOTOR MOVIES, Clayton Ave. and Hwy. 50. Exec: J. A. Huff, 546 E. Main St. (M12-C600-D7)

Twainharte, Cal. AMPHITHEATRE OPEN AIR (Summer Only) Exec: Arthur Rude and Jack Lewis (CLOSED). (M6-C300-D7)

Vallejo, Cal. CRESCENT DR., County Rd. off Hwy. 29. Exec: Guy Meek Ct. (M12-C640-D7)

Visalia, Cal. TULARE MOTOR IN. P.O. R.R. 6, Box 403. Exec: Robert L. Lippert Ct. (M12-C485-D7)

Yuba City, Cal. AUTO SEE TH. Exec: Auto See Movies Inc. (M12-C600-D7)

Nevada

Reno, Nev. MIDWAY DR. Hwy. 395 and S. Virginia Rd. Exec: Floyd Bernard. (M5-C250-D7)

SEATTLE TERRITORY

Idaho

Lewiston, Ida. AUTO VUE DR. Hwy. 95. Exec: Mildred Wall, Liberty Theatre Corp. (M7-C450-D7)

Washington

Alderwood Manor, Wash. SNO KING DR., Hwy. 99. Exec: C. J. Rockey, 4534 - 14th Ave. S., Seattle 8. (M7-C650-D7)

Bellingham, Wash. MOTOR VUE DR. Hwy. 99. Exec: Larson and Gillette. (M7-C450-D7)

Bremerton, Wash. RODEO DR. Belfair Hwy. Exec: Rodeo, Inc., P.O. Box 898, Port Orchard. (M8-C600-D7)

Kennewick, Wash. HI LAND DR., Hwy. 410. Exec: Midstate Amuse. Corp., P.O. Box 398, Walla Walla. (M7-C600-D7)

Kennewick, Wash. Y PARK IN, Hwy. 410. Exec: F. M. Higgins, Higgins Amuse. Co., Seattle. (M7-C350-D7)

Midway, Wash. MIDWAY MOTOR IN, Hwy. 99. Exec: Ed Johnson, Spokane. (M12-C500-D7)

Millwood, Wash. MOTOR IN, Hwy. 53. Exec: Lowell Thompson Motor-in Theatres. (M6-C600-D7)

Olympia, Wash. SUNSET DR. Hwy. 99. Exec: A. O. Bergans and Fred S. Miller. (M7-C480-D7)

Omak, Wash. VALLEY DR. Hwy. 97. Exec: A. J. Varrelman (UNC). (M7-C*-D7)

Seattle, Wash. AURORA MOTOR IN, Hwy. 99, 13500 Aurora Ave. Exec: Johnson and Spracher. (M12-C500-D7)

Seattle, Wash. DUWAMISH DR., Hwy. 99. Exec: William Forman, United Theatres, Inc., Smith Tower Bldg. (M8-C600-D7)

Spokane, Wash. AUTO VIEW, Hwy. 195. Exec: C. Young. (M6-C400-D7)

Spokane, Wash. EAST SPRAGUE DR., Sprague Ave. Exec: Joseph Rosenfield, N. 226 Post St. (M8-C600-D7)

Tacoma, Wash. AUTO VIEW DR. McChord Field, Hwy. 99. Exec: William Forman, United Theatres, Inc., Smith Tower Bldg., Seattle. (M-8-C500-D7)

Tacoma, Wash. STAR LIGHT DR., Hwy. 99. Exec: Nilsson and Theuerknuf. (M8-C500-D7)

Union Gap, (Yakima) Wash. TOWER DR. Hwy. 97. Exec: Fred Mercy, Jr., First National Theatres Ct., Yakima. (M7-C650-D7)

Walla Walla, Wash. SKY VUE DR. Hwy. 410. Exec: Midstate Amuse. Corp., P.O. Box 398. (M7-C400-D7)

Wenatchee, Wash. AUTO VUE, Hwy. 10, P.O. Box 57. Exec: Charles Grieme, Grieme and Fasken. (M6-C250-D7)

WASHINGTON TERRITORY

Maryland

Baltimore, Md. NORTH POINT DR., North Point and Battle Grove Rds. Exec: Frank H. Durkee, Jr., Durkee Enterprises Ct. (M8-C600-D7)

Beltsville, Md. SIDNEY LUST DR., Rt. 1. Exec: Sidney Lust Ct., 711 - 14th St., N.W., Washington, D.C. (M9-C625-D7)

Cumberland, Md. POTOMAC DR., Rt. 53, P.O. Box 176. Exec: K. R. Baker and G. R. Sutherland. (M9-C450-D7)

Deer Park, Md. PARADISE DR., Rt. 2. Exec: C. A. Kisner. (M9-C• -D7)

Elkridge, Md. ELKRIDGE DR., 6200 Washington Blvd. Exec: Ralph Rose. (M8-C500-D7)

Elkton, Md. ELKTON DR., Rt. 40, P.O. R.D. 2. Exec: N. Rosen. (M9-C• -D7)

Glenburnie, Md. GOVERNOR RITCHIE DR., Rt. 301 and Governor Ritchie Hwy. Exec: E. M. Loew Ct., Boston, Mass. (M8-C500-D7)

Hagerstown, Md. HI WAY DR. Exec: Dan Weinberg. (M7-C500-D7)

Mount Lena, Md. HI WAY DR. Exec: Dan Weinberg. (M9-C300-D7)

Williamsport, Md. HAGER DR. Exec: Fred Ungar. (M8-C350-D7)

Virginia

Abingdon, Va. MOONLITE DR., Rt. 2. Exec: T. D. Field. (M6-C400-D7)

Alexandria, Va. MOUNT VERNON OPEN AIR, Rt. 1. Exec: E. M. Loew Ct., Boston, Mass. (M8-C500-D7)

Arlington, Va. AIRPORT DR., 2001 Jefferson Davis Hwy. Exec: Paul J. Foley. (M7-C1000-D7)

Bailey's Cross Roads, Va. SUNSET DR., Leesburg Pike, Rt. 7. Exec: Henry Wilson, 6500 Carlyn Court, Falls Church. (M7-C200-D7)

Bassett, Va. FAMILY DR., Bassett Forks. Exec: Cecil Ward. (M10-C200-D7)

Cismont, Va. SEVEN PINES DR., Hwy. 231. Exec. J. G. Pugh. (M7-C100-D7)

Covington, Va. CALLAGHAN DR. Exec: E. L. Lockhart. (M8-C200-D6)

Covington, Va. HI WAY DR. Exec: H. W. Robertson and Roy Garber. (M8-C300-D6)

Danville, Va. CRESCENT DR. Exec: S. W. Craver, P.O. Box 1206, Charlotte, N. C. (M7-C500-D7)

Dublin, Va. PULASKI DR., Rt. 11. Exec: J. L. Fauw. (M6-C175-D7)

Edinburg, Va. SHENANDOAH DR. Exec: Coffman and Keyrer. (M7-C300-D7)

Galax, Va. MIDWAY DR., Rt. 221. Exec: F. R. Jones. (M8-C200-D7)

Gate City, Va. SUNDOWN DR. Exec: L. R. Fuller. (M6-C200-D7)

Hampton, Va. SIDNEY LUST DR. Exec: Sidney Lust Ct., 711 - 14th St., N.W., Washington, D.C. (M8-C760-D7)

Harrisonburg, Va. HARRISONBURG DR., P.O. Box 685. Exec: M. W. Bean. (M7-C200-D7)

Louisa, Va. DICK'S OPEN AIR. Exec: (•). (M7-C100-D7)

Lynchburg, Va. HARVEY'S DR. Exec: J. P. Harvey. (M8-C500-D6)

Marion, Va. SKYVIEW DR. Exec: Moir Branscome and Howard Chitwood. (M8-C•-D7)

Martinsville, Va. DRIVE IN, Hwy. 220. Exec: W. A. Davis, F. B. Davis and S. B. Terry. (M8-C300-D6)

McClure, Va. LEE OPEN AIR, Rt. 64. Exec: Earl Mullins. (M7-C75-D7)

New Canton, Va. ARVONIA DR. Exec: W. D. Browning. (M8-C100-D7)

Newport News, Va. GREEN ACRES AUTO TH., 39th St. and Aberdeen. Exec: Peninsula Amuse. Co. (M7-C350-D7)

Norfolk, Va. PRINCESS ANN DR., Virginia Beach Blvd., Rt. 58. Exec: Fabian Theatres Ct. (M8-C800-D7)

Norfolk, Va. WILDER'S DR. Swel's Point. Exec: Mrs. A. B. Wilder, Colley Theatre Bldg., Norfolk. (M8-C650-D7)

Norton, Va. LONESOME PINE DR. 520 Park Ave. Exec: P. O. Datson. (M8-C175-D7)

Pearisburg, Va. LINDENHURST PARK DR. Exec: L. Hurst. (M9-C300-D6)

Petersburg, Va. PARK DR. Exec: Park Amuse. Co. (M9-C500-D7)

Petersburg, Va. PETERSBURG DR. Exec: F. K. McKinnish. (M8-C175-D7)

Port Richmond, Va. WEST POINT DR., Rt. 30. Exec: J. B. Cowles and M. Pilcher. (M9-C350-D7)

Portsmouth, Va. AUTOPORT DR. Exec: Portmouth Amuse. Co. (M8-C500-D7)

Radford, Va. HI WAY DR., Rt. 11. Exec: Harold Kotmen. (M9-C300-D7)

Richmond, Va. BELLWOOD DR., Rt. 1, P.O. Box 1896. Exec: Fabian Theatres Ct. (M8-C1000-D7)

Richmond, Va. BROADWAY OPEN AIR, 4116 Grove Ave. Exec: J. H. Groh. (M8-C504-D7)

Richmond, Va. DIXIE DR., P.O. R.F.D. 9, Box 135C. Exec: C. Childress. (M8-C355-D7)

Richmond, Va. STARLITE DR., Williamsburg Rd. Exec: Layfield and Parker. (M8-C500-D7)

Roanoke, Va. BURLINGTON DR. Exec: H. Saunders Theatres Co. (M9-C275-D7)

Roanoke, Va. LEE HI DR., Rt. 11. Exec: J. R. Francis. (M9-C750-D7)

Roanoke, Va. NORTH 11 DR., Exec: R. C. Saunders. (M9-C300-D7)

South Boston, Va. MOONLITE DR., Rt. 58. Exec: D. G. Harris. (M8-C75-D7)

Stony Creek, Va. STONY CREEK DR., Rt. 301. Exec: Chas. C. Bryant, Emporia. (M6-C200-D7)

Suffolk, Va. PLANTATION DR. Exec: Cecil Houck. (M8-C500-D7)

Tabb, Va. TABB DR., Rt. 17. Exec. M. V. Hegge. (M7-C200-D7)

Vinton, Va. DIXIE DR. Exec: F. E. Creary. (M9-C275-D7)

Waynesboro, Va. DRIVE IN. Exec: Newbold-Keesling Ct. (M9-C• -D7)

West Point, Va. WEST POINT DR. Exec: V. P. Tierno. (M7-C250-D6)

Williamsburg, Va. STOCKADE AUDITORIUM, Richmond Rd. Exec: Cecil Houck. (M7-C350-D7)

Winchester, Va. ROYAL DR. Exec: F. E. Ours. (M7-C300-D7)

Winchester, Va. WINCHESTER DR., Siler Star Route. Exec: Ray J. Becker. (M7-C200-D7)

Windsor, Va. WINDSOR DR. Exec: M. A. Watson. (M9-C100-D7)

Wise, Va. MULLINS OPEN AIR, Rt. 23. Exec: Earl B. Mullins. (M8-C75-D7)

Wytheville, Va. SUNSET DR. Exec: Monvern Dalton. (M8-C• -D7)

West Virginia

Burlington, W. Va. BAKERS AIR PARK TH. Exec: D. S. Baker. (M7-C200-D7)

Martinsburg, W. Va. PINE GROVE DR. Exec: Harry Atkin. (M8-C275-D6)

Martinsburg, W. Va. SKYVUE DR. Exec: Mrs. S. D. Murphy. (M7-C195-D7)

Moorefield, W. Va. MOOREFIELD DR., Rt. 220. Exec: James M. Miley. (M8-C200-D7)

SHOWTIME at the 750-car SIDNEY LUST'S, HAMPTON, VA., finds the ramps filled and use being made of the auxiliary chairs. It was designed by specialist George Petersen of Cleveland.



Landscaping and Planting Suggestions

Adherence to a Few Basic Rules and Consultation With Good Nurserymen Produce Drive-Ins of Beauty

By Dr. Richard P. White
Horticulturist and Executive Secretary, American Association of Nurserymen Washington, D. C.

BRIEF: *There is a wise dictum abroad which states . . . "if you aren't going to do something right, don't do it at all" . . . It is unfortunate . . . both from a scenic and practical point of view . . . that too many drive-in operators have ignored these sage words in the landscaping of their theatres . . . In their frantic efforts to improvise some sort of natural decorative touch for their sites, many outdoor operators have fallen prey to the advice of some local "grass cutter" and have purchased very inferior planting stock . . . In addition, theatremen have proceeded to plant recklessly numerous varieties of plants and flowers . . . without regard to whether or not they were acclimated to the locality . . . In many cases, the result has been a disorderly landscaping job . . . Often shrubbery has not survived more than one season . . . And even more often, varying rates of growth have destroyed the desired effect in a second season.*

A drive-in site properly planted, landscaped, and maintained, however . . . is an enviable asset to its community . . . and will still the complaints of those who assail it as an eyesore . . . In fact, a drive-in which has been correctly landscaped will lure more business . . . Such a worthwhile goal may be attained easily by following several fundamental precepts . . . and by calling in the services of a competant nurseryman or landscape engineer . . . who will be glad to lend his experience to the solution of any horticultural problems.

The editors of THEATRE CATALOG present below a simple introduction to good drive-in planting and landscaping . . . intended as a prelude to a more extensive discussion of these problems in a future edition.

GENERAL HINTS

Landscaping and planting of the grounds around drive-in theatres is an investment that returns increased patronage. The theatre should, by contrast to the surrounding landscape, be more beautiful, more restful and more inviting.

Simplicity and Neatness

To get the most for his "landscaping dollar," the drive-in operator must design his landscaping to be appreciated by the greatest number of people. There is no place in the scheme for fancy gadgets, such as statues, vases, brightly-colored annual flower beds, etc., which do not show up to best advantage at night and which increase maintenance costs. A simple design and a trim, neat effect are desirable. Use of planting in masses and as hedges is suggested, so that what is lost in height is made up by length and breadth, and use of perennial gardens.

Low plants used in this way can be set in scale with the taller structures, where the tallest tree would not be. Masses of green in studied form, shape, and symmetry will harmonize with individual architectural lines. Climbing roses around fences and walls of the drive-in theatre may add pleasing contrast. Desirable effects cannot be achieved by a collection of novelties chosen at random from highly colored, illustrated catalogs. The theatreman must sit down and plan his planting first.

Consult an Expert

The selection of a first-rate landscape nurseryman, nursery representative, or horticulturist is of primary importance. Any town of consequence has one or more. He will see that the drive-in gets the proper plant materials, hardy species for whatever section of the country it is located in, and will help to keep both the original investment and maintenance costs more reasonable. Varieties that can easily be controlled as to size, thereby avoiding encroachment upon walks and drives, give more for the "landscaping dollar". Then, too, the planting must be planned so that it will always attract, but never screen, the passing motorist from the theatre. Undesirable adjoining property can be screened off by plantings, however, without detracting from, and at the same time greatly enhancing, the theatre itself. Nearly every community has a recognized landscape nurseryman, plantsman, or horticulturist who is best qualified to advise as to local conditions which, of course, vary widely throughout the country both in regard to climate and soil.

Necessary Requisites

To obtain the "better look" for a drive-in theatre, certain qualifications are required as follows:

1. Proper soil preparation before planting. Good growing conditions are more economical to procure at the start than through years of labor building the soil afterward.
2. Maintenance of grounds is as important as maintenance of buildings. This is particularly true of the drive-in theatre, for people see and are impressed first by the outside appearance. Good maintenance of grounds implies proper cultivation, feeding or fertilizing, watering, and trimming. While plants are living things and need some attention, the proper choice of plant materials will reduce this maintenance cost to a minor amount.

The Value of Good Landscaping

The widespread adoption of landscaping and planting by drive-in theatres has been proven to be "good business". The theatre becomes more of an asset to the community, oftentimes effecting noticeable improvement in its particular area. This achievement will have its effect on future zoning laws, make people more eager to have such theatres in the neighborhood, and more eager to patronize them as well.

PLANTS SUITABLE FOR VARIOUS AREAS

(See map)

Following is a list of some of the many available plants from which selections can be made for four of the most clearly divisible climatic areas of the United States, as shown on the accompanying map. This list is by no means complete, as there are, of course, many thousands of plants and trees. Conditions vary considerably as to topography and climate even within these areas, and the local nursery expert must be relied upon for the best advice in his particular area.

Area I

Alpine Currant
Peashrub (caragana)
Japanese Barberry
Red-twigged Dogwood
Hardy Honeysuckle
Golden Elder
Mock Orange
Snowberry
Spireas
Ginnala Maple
Climbing Roses
Perennials

Area II

Thujas (arborvitae)
Junipers (pfitzeriana, chinensis)
Ligustrums (privet)
Viburnums in variety
Barberries
Firethorns
Mahonia aquifolia, nervosa—Oregon Grape
Euonymus (alatus, vegetus, etc.)
Pines (mugho)
Hawthorns
Pyracanthas
Lindens
Sycamore
Ginkgos
Maples
Forsythias
Climbing Roses
Perennials

Area III

Thujas
Junipers
Ligustrums (privet)

Boxwood
Buckthorns
Forsythias
Euonymus
Tulip tree
Redbud
Azaleas
Camellias
Pyracanthas
Oaks
Mimosa
Viburnums
Cotoneaster
Nandina
Hollies
Dogwood
Crapemyrtle
Climbing Roses
Perennials

Area IV

Ligustrums
Oleanders
Hibiscus
Jasmines
Coconut Palm
Live Oak
Bougainvillea
Sweet and Black Gums
Magnolias
Sycamores
Abelias
Nandina
Indian Cedar
Yucca
Plum Yew
Climbing Roses
Perennials

RECOGNIZED SOURCES

The following companies and individuals are members of the American Association of Nurserymen, which is a national body with executive offices in Washington, D.C. Each is considered qualified to render a skilled advisory or planning service; and each is pledged to an honorable and straightforward business policy in which the theatreman can have confidence. They are listed here as trustworthy sources of both advice and supply.

Alabama

Alabama Nursery & Landscape Co., Chase
Athens Nursery Co., Athens
Barton Nursery, Box 464, R. F. D. 9, Birmingham 8
Blackwell Nurseries, Inc., Semmes
Byers Nursery Co., Chase
Chase Nursery Co., Chase 6
Dodd Nurseries, Tom, Semmes
Empire Nursery & Orchard, Baileyton 1
Foster Nursery Co., Route 1, Box 392, Bessemer
Fraser Nurseries, Inc., P. O. Box 465, Birmingham
Huntsville Wholesale Nurseries, Inc., The, Huntsville
Ibsen Seed Co., Inc.—Nursery Dept., P. O. Box 385, Mobile
King Nursery, Bates, Leighton
King's Nursery Box 63, Auburn
Lakeview Nursery, R. 1, Box 285, Anniston
Naugher Nursery, Chase
Overlook Nurseries, Rt. 1, Box 114, Crichton
Park Nursery Co., The, 911 Pike St., Huntsville
Perfection Nurseries, Box 206, Foley
Ponder Nursery, 618 6th Ave., Lanett
Semmes Nurseries, Semmes
Southern Tree & Landscape Co., P. O. Box 168, Tuscaloosa
Southland Nurseries, Inc., Route 2, Box 217-E, Mobile 1
Sunny Knoll Nursery, Rt. 2, Box 182, Mobile
Tuscaloosa Nursery, R. F. D. No. 4, Box 110-A, Tuscaloosa

Arizona

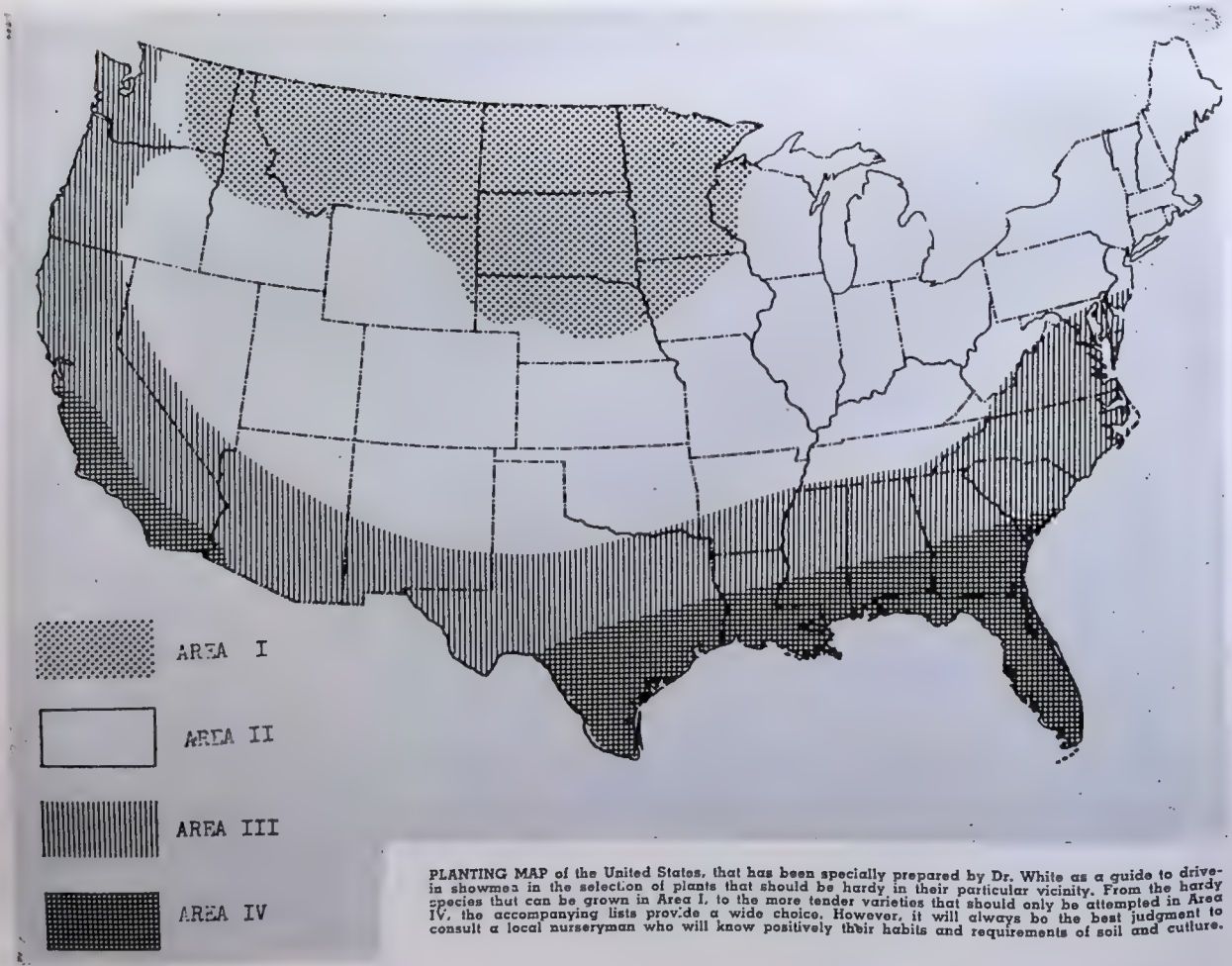
Flowerland Nursery & Landscaping, P. O. Box 1722, Tucson
Norman Nursery & Flower Shop, Inc., 2508 N. Central, Phoenix
Tropical Groves Nursery, Phoenix

Arkansas

Basham Nursery, V. P., Mountainburg
Benton County Nursery Co., Rogers 5

California

Anderson, F. W., 826 22nd St., Merced
Armstrong Nurseries, Inc., 408 N. Euclid Ave., Ontario
Beeler Bros. Nursery, 113 S. LaBrea Ave., Inglewood
Birchlane Farm, 275 Locust Ave., San Rafael
Booy Nurseries, The Peter J., Rt. 1, Box 197, San Jacinto
Brummell Nursery, I. L., 9712 E. Dunlap, Rivera
Camellia Hall, 4950 44th St., Sacramento
Capital Nursery Co., P. O. Box 1162, 4750 Freeport Blvd., Sacramento 6
Christensen Nursery Co., 935 Old Country Road, Belmont



PLANTING MAP of the United States, that has been specially prepared by Dr. White as a guide to drive-in showmen in the selection of plants that should be hardy in their particular vicinity. From the hardy species that can be grown in Area I, to the more tender varieties that should only be attempted in Area IV, the accompanying lists provide a wide choice. However, it will always be the best judgment to consult a local nurseryman who will know positively their habits and requirements of soil and culture.

Clarke & Co., W. B., P. O. Box 343, San Jose 2
Coates Nurseries, Inc., Leonard, P. O. Box 231, San Jose 2
Conklin, H. A., 2034 Glendora Ave., W. Covina
Cooke, L. E., 112 Vista St., San Gabriel
Deigaard Nurseries, Monrovia
Del Amo Nurseries, P. O. Box 389, Compton
Del Rancho Fortuna, P. O. Box 548, McFarland
Domoto Nursery, Toichi, "The Home of Distinctive Plants," 26591 Western Rd., Hayward
Edwards Nursery, John E., 1585 Bay Road, Palo Alto
Evans & Reeves Nurseries, Inc., 255 S. Barrington Ave., Los Angeles 24
Fowler Nurseries, Newcastle
Germain Seed & Plant Co., 747 Terminal St., Los Angeles 21
Hanover's Nursery, 5303 W. Washington Blvd., Los Angeles 16
Howard's California Flowerland, Paul J., 11700 National Blvd., Los Angeles 34
Howard Rose Co., Inc., Box 725, Hemet
Howard & Smith, Montebello
James Nursery, E., 8715 MacArthur Blvd., Oakland 3
Kallman's Garden Nursery Co., 228 No. Milpas St., Santa Barbara
Keeline-Wilcox Nurseries, P. O. Box 278, Montebello
Kirkman Nurseries, Tracy
Lagomarsino & Sons, F., 1223 Alhambra Blvd., Sacramento 5
Linwood Nursery, R. 2, Box 476, Turlock
Matlin's Nursery, Ely and Fern St., Ontario
McDonnell Nursery, 5146 Telegraph Ave., Oakland 9
Merrick Nurseries, L. B., Whittier
Moffet Nursery, John A., 1726 Helen Ave., Modesto
Monrovia Nursery Co., H. E. Rosedale, Owner, 102 Duarte, Monrovia
Mordigan Evergreen Nurseries, Box 109, San Fernando
Mossholder Nursery, 1130 E. Vally Blvd., El Monte
Pastor Nursery, A., 4013 Lennox Blvd., Inglewood
Peters & Wilson Nursery, Millbrae
Plath & Sons, Inc., H., 206 Lawrence Ave., San Francisco 25
Point Loma Nursery, 1150 Greenwood St., San Diego 10
Pratt's Nursery, Vallejo
Rancho del Descanso, 1418 W. Descanso Drive, La Canada
Schmidt Nursery, 308 Chestnut Ave., Palo Alto
Select Nurseries, P. O. Box 107, Whittier
Sierra Nursery & Seed Co., 1276 No. 1st St., Fresno 4
Stocking's Rose Nursery Rt. 5, Box 42, San Jose
Sunnyside Nursery, Sir Francis Drake Blvd., San Anselmo
Sylmar Nurseries, P. O. Box 552, San Fernando
Teck's Landscape Nursery & Flower Shop, 1075 Scherokee Lane, Lodi
Vaunlanda Gardens Nursery, 511 Sunset Ave., Woodland
Vistica Nursery, Louis, Route 1, Live Oak
Weeks' Nursery, R. F. D. 3, Box 323, Santa Ana
Wilcox & Co., Roy F., Box 240, Montebello
Winsel-Gibbs Seed & Nursery Co., 1955 W. Florence Ave., Los Angeles 44

Colorado

Alameda Nursery, Inc., 2645 West Alameda Drive, Denver
Amidon's Cash Nursery, 2155 W. 48th Ave., Denver 11
Colorado Gardens & Nursery, The, 2406 Wood Ave., Colorado Springs
Fort Collins Nursery, 1500 La Porte Ave., Fort Collins
Glenmore Nursery, 2215 Locust St., Denver 7
Green Bowers Nursery, Box 234, Denver
Kroh Brothers Nurseries, P. O. Box 536, Loveland
Littleton Nurseries, Littleton
Marshall, Maurice, N., 4747 W. Colfax, Denver 4
Roberts Nurseries, Inc., P. O. Box 192, Littleton
Roselawn Nursery, P. O. Box 2036, Pueblo
Saint Vrain Valley Nursery, D. W. Spangler, 11th and Collyer St., Longmont
Upton Gardens, Colorado Springs
Williams Gardens, 1031 20th St., Greeley
Wilmore Nurseries, W. W., Box 382, Denver 1
Woodman & Bros., Roy E., 1251 South Williams St., Denver

Connecticut

Barnes Brothers Nursery Co., The, Yalesville
Bristol Nurseries, Inc., The, Bristol
Brouwer's Nursery, Jack, 55 Lester St., New London
Brouwer's Nurseries, 624 Montauk Ave., New London
Brouwer's Nurseries, Peter, 27 Lester St., New London
Burr & Co., Inc., C. R., Manchester
Cascio Nursery, The Peter, 2600 Albany Ave., West Hartford 7
Clinton Nurseries, Clinton
East Hartford Nursery, 1350 Silver Lane, East Hartford
Evergreen Nursery Co., The, Wilton, Fairfield County
Gardner's Nurseries, Rocky Hill
Holcomb's Evergreen Nursery, R. F. D. 2, Winsted
Hoyt's Sons Co., The Stephen, New Canaan
Kennedy Nursery, The, Greenwich
Leghorn's Evergreen Nurseries, Cromwell
Litchfield Hills Nursery, Litchfield
Millane Nurseries & Tree Expert Co., Cromwell
Mount Philip Nursery, Wentogue
North-Eastern Forestry Co., The, South Main St., Cheshire
Pierson, Inc., A. N., Cromwell
Pound Ridge Nurseries, R. F. D. 1, Box 172, New Canaan
Preston Nursery, R. F. D., Norwich
Prospect Nurseries, Inc., Main St., Cromwell
Robinson, E. D., Sales Agency, Wallingford
Scott's Nurseries, Bloomfield
Shelton, Philo S., Burr St., Fairfield
Southport Nursery, Boston Post Road, Southport
South Wilton Nurseries, Jacob C. Van Helningen, Owner, Wilton
Sunny Border, Inc., Kensington, Conn.
Tanton's Nursery, Ridgefield
Terhune Nursery, Taconic Rd., Salisbury
Tuoti Landscape Co., Ridgefield
Vanderbrook & Son, C. L., P. O. Box 125, Manchester Sta. "A"
Van Heiningen Nursery, Deep River
Vasileff Nurseries, Inc., Greenwich
Verkade's Nursery, New London
Wayside Nursery, Waterbury-Naugatuck Highway, Naugatuck
Whitham Farms, 42 Gerard St., Manchester
Woodcock Nurseries, Inc., Danbury Rd., Ridgefield

Delaware

Buntings' Nurseries, Inc., Selbyville
Fairville Nurseries, Jos. A. Vogel, Owner, P. O. Box 588, Wilmington
Lovett, Lester C., Diamond State Nurseries, P. O. Box 335, Milford

District of Columbia

Krueger, Hedwig, 3414 29th St., N. W. 8

Florida

Davis Nursery, D. W., Seffner
Florida Nursery & Landscape Co., Leesburg
Glen St. Mary Nurseries Co., Glen St. Mary
Island Landscape Co., Inc., 309 S. County Rd., Palm Beach
Kinsman, Calvin D., 3315 N. W. 46th St., Miami
Lake Garfield Nurseries Co., P. O. Box 154, Bartow
Lake Tresca Nurseries, Rt. 1, Box 464-T, Jacksonville 7
Pearce's Nursery, P. O. Box 504, Quincy
Roberts Greenhouses, 1731 Gulf to Bay Blvd., Clearwater
Simpson Nursery Co., Box 178, Monticello
Stewart Nursery, 105 W. Park Ave., Tallahassee

Georgia

Baird's Georgia Nurseries, Fort Valley
Berckmans Road Nursery, 1101 Broad St., Augusta
Boxwood Acres, 520 Parkway Drive, N.E., Atlanta
Cato's Nursery, Bainbridge
Dudley Nurseries, Inc., P. O. Box 609, Athens
Edgewood Nurseries, 9 12th St., Columbus
Forest Park Nursery, Forest Park
Fruitland Nurseries, Box 910, Augusta
Hastings Co., H. G., 180 Mitchell St., S. W., Atlanta 2
Hogansville Nurseries, Hogansville
Jordan Nurseries, Milledgeville
Monroe's Landscape & Nursery Co., 1896 Monroe Drive, N. E., Atlanta
Newberry, George C., 1901 Peachtree Rd., N. E., Atlanta 3
Owen's Vineyard, Gay
Riverdale Nurseries, Riverdale
Sea Island Company, Sea Island
Smith Bros. Nursery Co., Concord
Sneed's Nursery, East Point
Thomasville Nurseries, Inc., Thomasville
Wight Nurseries, Cairo

Idaho

Fruitland Nursery, Fruitland
Nelson Floral & Nursery, P. O. Box 904, Boise
Petrie Landscape Nurseries, Route 2, Boise

Illinois

Belleville Nursery, R. R. 1, Belleville
Ben's Nursery, 23rd Ave. & 54th St., Moline
Bergman Nurseries, 3207 N. 12th, Quincy
Bryant's Nurseries, Arthur Bryant & Son, Princeton
Clavey, Inc., Elmer, Clavey Road and Skokie Blvd., Highland Park
Clavey Ravinia Nurseries, Inc., F. D., W. Deerfield Rd., Deerfield
Clegg, S. E., Plainfield
Corn Belt Nursery, 2020 South Main St., Bloomington
Custer Brothers Nurseries, Normal
de St. Aubin & Bro., Inc., Eugene A., Addison
Egyptian Nursery & Landscape Co., Farina
Eickhof Landscape Nursery, 6643 Ottawa Ave., Chicago 31
Elk Grove Nursery, Rt. 1, Box 125, Arlington Heights
Elmhurst Nurseries, York and Roosevelt Rds., Elmhurst
Fiore Nurseries, Charles, Prairie View 1
Golf Nursery, Shermer Road, Northbrook
Hartline Farm, H. B., R. F. D. No. 1, Makanda
Highland Park Nursery, Sterling
Hill Nursery Co., D., Dundee
Hinsdale Nurseries, Inc., R. P. Theidel, Pres., 7200 S. Madison Rd., Hinsdale
Home Nursery & Greenhouses, Box 181, Edwardsville
Hooks Nursery, Mount Prospect
Kankakee Nursery Co., 350 E. Court St., Kankakee
Knupper Nursery, R. C., R. F. D. 1, Palatine
Lee Florist & Nursery, C. J., 110 East Main St., Galesburg
Leesley's Nurseries, Libertyville
Lohse Nursery, Henry, Dixon
Mangel, Florist, 134 Skokie Highway, Wilmette
Meyers, M. J., Landscape Contractor, Aurora
Mission Gardens, Techny
Naperville Nurseries, Inc., Naperville
Oak Knoll Nursery, Rt. No. 1, Sandoval
Oak Park Nursery, 208 E. Main St., Streator
Onarga Nursery Co., Onarga
Oslund's Nursery, 308 S. State St., Bloomington
Palmgren's Nurseries, 645 Waukegan Rd., Glenview
Pring's Nursery, N. O'Farrell, Collinsville
Schroeder's Nursery, Box 220, R. F. D. 1, Des Plaines
Simonsen's Nursery, Glenview
Spencer, Elmer, Nurseryman & Landscape Contractor, 2709 S. MacArthur Blvd., Springfield
Sunnyside Nursery, Troy
Tures, Matt & Son, R. R. 8, Box 593, Des Plaines
Valley Landscape Co., P. O. Box 488, Elgin
Vaughan's Seed Store, Nursery Dept., Western Springs
Vienna Nursery, The, G. E. Galeener & E. C. Galeener, Props., Vienna
Warrenville Berry Farms, Warrenville
Wheeling Nurseries, Inc., Wheeling

Indiana

Auburn Nursery, Auburn
Bass, Floyd, New Augusta
Bohling's Nursery, Ridge Rd. at Kranz Ave., Munster
Bunch & Son, J. C., Terre Haute
Clearwater Nursery, Theo. Milse, R. R. 1, Milt Creek
Cunningham Gardens, Inc., Waldron
Eagle Creek Nursery Co., Inc., New Augusta
Elkhart Nursery Co., R. R. No. 1, Elkhart
Ernst Nurseries, Box 1226, Muncie
Foland Nursery, State Road 28 East, Elwood
Hans Home Nurseries, 29th & Poplar St., Terre Haute
Hillsdale Landscape Co., The, R. R. 13, Indianapolis 44
Hobbs & Sons, Inc., C. M., Bridgeport
Holman Nursery, Edward L., 5445 N. Keystone, Indianapolis
Judson Wholesale Nurseries, Bristol
Kindig Nursery, The, R. 5, Elkhart
Krider Nurseries, Inc., The, Middlebury
Laketon Nurseries, The, Laketon
Lilac Nurseries, Route 4, Box 190, South Bend
Littleford Nurseries, 1421 Weed Lane, Vincennes
Maschmeyer, Edward, 244 W. Troy Ave., Indianapolis 3
Mathews Nursery & Seed Co., 1216 W. Ridge Rd., Gary
Northwood Nursery & Orchard, Chas. R. Eckler, Danville
Pottenger Nursery, 3400 Lafayette Rd., Indianapolis
Price Nurseries, The, R. R. No. 1, Plymouth
Rust Nursery, R. R. 4, Crown Point
Shumaker Nurseries, R. F. D. No. 6, Rushville
Simpson Orchard Co., Box 88, Vincennes
Valley View Nursery, Martinsville
Wiegand's Evergreen Nursery, Kessler Blvd. and 26th St., Indianapolis 44

Iowa

Ames Nursery, Box 147, So. Duff, Ames
Baumhoefener Nursery, Cedar Rapids
Bent's Nurseries, Cresco
Carey Bros. Seed & Nursery Co., 5616 Douglas Ave., Des Moines
Cedar Rapids Nursery Co., R. R. 1, Cedar Rapids
Cutler & Vennard Nursery, Box 394, Sioux City 6
Davenport Nursery, Wm. H. Mast, Prop., Davenport
Des Moines Nursery Co., 907 Tuttle St., Des Moines 9
Diehl's Landscape Service, 2709 Meek Ave., Des Moines 11
Ferris Nursery, Earl, Hampton
Field Seed & Nursery Co., Henry, Shenandoah
Green Turf Landscape Co., 410 Fifth St., Ames
Heard's Landscape Nurseries, 4727 Beaver Ave., Des Moines 11
Inter-State Nurseries, Hamburg
Keller Landscape Service, A. V., 912 35th St., Des Moines 12
Kuehn's Nursery, Route 2, Cedar Falls
Lake's Shenandoah Nurseries, Shenandoah
Linn County Nurseries, The, Center Point
McKinness Landscape Service, Mason City
Mount Arbor Nurseries, Shenandoah
Oelwein Nursery Co., Oelwein
Perkins Seed Store, 309-311 Douglas St., Sioux City
Platt's Landscape Nursery, E. Kimberly Rd. at 36th St., Route 3, Davenport
Platt's Nursery, R. F. D. No. 4, Waterloo
Robinson & Parnham, 6015 Grand Ave., Des Moines 12
Sherman Nursery Co., The, Charles City

Kansas

Burk's Nursery, Dodge City
Garden Shop, Inc., The, H. C. Danbury, 4819 Shawnee Mission Road, Rosedale Station, Kansas City 3
Heart of America Nursery & Landscape Co., Overland Park
Holsinger Nursery Co., R. F. D. 6, Kansas City 3
Kansas Evergreen Nurseries, Manhattan
Kansas Landscape & Nursery Co., 1416 E. Iron Ave., Salina
Leavenworth Nurseries, Carl Holman, Prop., Leavenworth
Matzeder Nursery, A. B., R. R. No. 2, Leavenworth
Meyer's Nursery, M., 5439 S. Hydraulic, Wichita
Minich Nurseries, R. G., 74th and Nall Ave., Route 2, Overland
Mt. Hope Nurseries, Lawrence 23
Prairie Gardens Nursery Co., Inc., The, McPherson
Rogers & Son Nurseries, Thomas, 2145 E. 21st St., Wichita
Sarber Nursery Co., 3100 W. 10th Ave., Topeka
Schnitzler Nursery, 2011 So. Hillside, Wichita 9
Shawnee Nurseries, Shawnee
Skinner & Co., J. H. Topeka
Stone Nurseries, Wichita
Taylor & Sons, L. R., Topeka
Wagoner Nurseries, The, Route 4, Hutchinson
Weaver Bros. Nursery & Greenhouse, Box 640, Wichita 1
Willis Nursery Co., The, Ottawa

Kentucky

Arterburn Nursery, Paul, P. O. Box 72, St. Matthews
Barr & Leichhardt Nursery, Nashville Road, Bowling Green
Crume Nursery & Landscaping Co., T. C., Florence
Dixie View Nurseries, 4 Flower Court, Lakeside Park, Covington
Donaldson Nurseries, P. O. Box 266, Sparta
Fike Nurseries, Hopkinsville
Gardiner Nurseries, Boone, R. F. D. No. 6, Louisville 7
Hang Nurseries, The, R. L., Jeffersontown
Hillenmeyer Nurseries, Lexington
Hill's Nursery, Warsaw
House Plant & Nursery Store, 4220 Shelbyville Rd., St. Matthews
Kingsley Walker Nurseries, Walker Ave., Louisville 9
Korfhage, Louis J., Shively
Leeming Nursery, 4411 Dixie Highway, Louisville 16
Martin's Nursery, Carrollton
Mount Pleasant Gardens, 1810 N. Ft. Thomas Ave., Ft. Thomas
Nick's Nursery, Rt. 2, Anchorage
Otte Nursery Gardens, Clarence, 306 Penruth Ave., Louisville
Painter-Schevetto Nursery, Middletown
Ray Co., Carl, St. Matthews 7
Reynolds Nursery, Bondville
Wallitsch Nursery, Herman R., Hikes Lane, Louisville
Willadean Nurseries, Inc., Sparta

Louisiana

Casadaban's Nurseries, Abita Springs
Dogwood Hill Nursery, Folsom
Folsom Nursery, Folsom
Hillside Nursery, Folsom
Jennings Nursery Co., Inc., Jennings
McKee's Nursery, P. O. Box 749, Covington
Polizzotto, Frank, 5785 Highland Rd., Baton Rouge 14
Scheinuk's Roseland Florist, 447 Main St., Baton Rouge 8
Shadow Nurseries, Route 2, Alexandria 4
Simon Nursery, Inc., C. G., Breaux Bridge Ave., Lafayette
Stoutes Nursery, Charles, Youngsville

Maine

Braden Nursery, P. O. Box 1463, Portland
Wallace Nurseries, 854 Main St., So. Portland

Maryland

Allen Co., The W. F., Salisbury
Akehurst, Carville G., Joppa Road, Fullerton
Bailer's Nursery, 109 64th Pl., Maryland Park
Bountiful Ridge Nurseries, Princess Anne
Brandt Nursery Co., J. W., Upper Falls
Burton, J. H., Hyattsville
Carroll Gardens, Westminster
Eastern Shore Nurseries, Inc., Easton
Grier Nurseries, Forest Hill
Gude Sons Co., A., Rockville
Kingsville Nurseries, Kingsville
Loudon Nurseries, Frank Primrose, Pikesville 8
Pickett, E. Williar, Pickett's Nursery, Woodbine
Pielke & Son, Inc., E., Fullerton
Rayner Bros., Salisbury
Rolandhurst Nurseries, Hebron
Simon, Andrew, 7727 York Rd., Towson 4
Stock Bros., Inc., Bradley Blvd., Bethesda 14
Ten Oaks Nursery & Gardens, Clarksville
Tingle Nursery Co., The, Pittsville
Town and Country, Inc., P. O. Box 4, Baltimore 10
Towson Nurseries, Inc., Towson 4
Valley Landscape Company, Falls Rd., Baltimore 9
Warner's Landscape Service, 6101 N. Charles St., Baltimore
Westminster Nurseries, Westminster

Massachusetts

Adams Nursery, Inc., Westfield
Atwater Nurseries, 368 South St., Agawam
Bay State Nurseries, Inc., The, North Abington
Bigelow Nurseries, Northboro
Bradrae Nursery Co., 18 Bowdoin St., Newton Highlands
Cape Cod Nurseries, H. V. Lawrence, Falmouth
Cherry Hill Nurseries, West Newbury
Chesnicka Landscape Service, J. J., P. O. Box 436, Westfield
Corliss Bros., Inc., Gloucester
Eastern Nurseries, Inc., Fiske St., Holliston
Eastern Tree & Landscape Corp., 280 Bridge St., Dedham
Fish & Co., Chas. R., 39 School St., P. O. Box 125, Auburn
Four Ponds Nursery, Box 269, Clinton
Griffin's Nursery, Southwick
Hentherfells Nursery, Heinrich Rohrbach, Sunset-rock Rd., Andover
Kelsey, Inc., Harlan P., Kelsey-Highlands Nursery, East Boxford
Landscape Service Co. of Framingham, The, 129 Concord St., Framingham
Lexington Nurseries, Inc., Lexington 73
Lincoln Nurseries, South Lincoln
Littlefield-Wyman Nurseries, 227 Centre Ave., Abington
McManmon's Nurseries Trust, Ltd., Box 794, Lowell
Mid-Cape Nurseries, Box 206, West Dennis

AN ARTIFICIAL LAKE can provide many interesting possibilities for decorative planting and scenic effects. Good advantage has been taken of these possibilities at the architecturally beautiful, floodlighted Cedar Valley Drive-In, Rome, Georgia, where owner Oscar Lam has produced many new and effective features that make his theatre stand out as one of the nation's finest. A complete pictorial presentation is found in this edition.



North Wilmington Nurseries, H. C. Barrows, Prop., North Wilmington
Van's Nursery & Landscape Service, Route 6, Fairhaven
Van Tol Nurseries, P. O. Box 115, Teaticket
Weston Nurseries, Inc., Weston 93
White Landscape Service, 22 Rockland St., Brockton
Winslow Nurseries, Needham
Wyman's Framingham Nurseries, Framingham

Michigan

Ackerman Nurseries, The, R. W. Ackerman, Prop., Bridgman
Aldrich's Nurseries, Farmington
Almena Nursery, Box 169, Paw Paw
Andersen Evergreen Nursery, Scottville
Armintrouts Evergreen Nursery, Allegan
Baldwin Nursery, O. A. D., Bridgman
Barnabys Landscape Nursery, 1145 Neland, S. E., Grand Rapids
Bay City Nurseries, 1715 Columbus Ave., Bay City
Blumfield Nurseries, Reese
Bolt Landscape Service, Arthur, 27 Diamond N. E., Grand Rapids
Boyer Nurseries, A. H., Route 1, Bangor
Brown Co., Emerson, 124 So. Woodward, Birmingham
Burgess Seed & Plant Co., Galesburg
Burgett Nursery, Kenneth, 868 Fuller Ave., N. E., Grand Rapids
Cass River Nurseries, 1723 Stone St., Saginaw 62
Charlevoix County Nursery, East Jordan
Cottage Gardens, The, Lansing 15
Cutler & Downing Co., Benton Harbor
Durrant Nurseries, 4461 Cascade Road S. E., Grand Rapids 6
Elzinga, John M., P. O. Box 142, Benton Harbor
Emlong's Nurseries, Inc., Stevensville
Englerth Gardens, 4652 Division Ave., South, Grand Rapids
Farmington Gardens Nursery, Farmington
Fox Spring Haven Nursery, Spring Lake
Genesee Nurseries, Flint 7
Greening Nursery Co., The, Monroe
Grootendorst, A. M., P. O. Box 123, Benton Harbor
Heart-O-Michigan Farms & Nurseries, Farwell
Hill Top Orchards & Nurseries, Hartford
Hunziker & Sons, M. J., Niles
Ilgenfritz Nurseries, Inc., 708 E. Front St., Monroe
Kazoo-Goliath Pansy & Perennial Gardens, 206 Richards Ave., Kalamazoo 33
Keizer, John, 2160 East Fulton St., Grand Rapids 6
Keizer Nursery, 260 Lakeside Drive, N. E., Grand Rapids
Koolen Nursery & Landscape Service, John L., 6148 S. Division Ave., Grand Rapids 8
Krieger's Wholesale Nursery, Bridgman
Light's Tree Company, Richland
McDonald Nursery, 1019 N. Center Rd., Saginaw
Merry-Hill Nursery, 49620 Ann Arbor Road Plymouth
Miller Nursery, R. D., Rt. No. 4, Wood St., Lansing
Nagle's Nursery, Route 2, Benton Harbor
Newport Nursery Co., Newport
Paw Paw Nurseries, Frank Nelson, Paw Paw
Plymouth Nursery, Plymouth
Pontiac Nursery Co., Romeo
Prudential Nursery Co., Vicksburg
Rambo's Wholesale Nurseries, L. J., Bridgman
Richards Gardens, Plainwell
Spielman & Son, J., Box 204, Adrian
Stahelin Nurseries, Inc., 18501 Grand River Ave., Detroit 23
Stark Nursery, Midland
Studley Nursery, Walter A., R. F. D., Fennville
Tisch Nurseries and Greenhouses, Marne
Upton Nursery Company, 4838 Spokane Ave., Detroit 4
Vanderploeg, Jan B., North Muskegon 31
Watson Nurseries, The Arthur L., 2905 Byron Rd., S. W., Grand Rapids 9
Ward's Flower Ranch, R. R. No. 2, Box 193, Lansing
Weller Nurseries Co., Inc., Holland
Westcroft Gardens, Grosse Ile
Westhauser Nurseries, Sawyer
Whitten Nurseries, The, Bridgman
Wil-Ferd Mel-Dale Nurseries, 4052 N. Euclid, R. 5, Bay City
Willow-Run Nurseries, 38135 Michigan Ave., Wayne

Minnesota

Andrews Nursery Co., Faribault
Arneson, Morten, 4951 Excelsior Blvd., Minneapolis 16
Bachman Sons, Inc., Henry, 6010 Lyndale Ave. So., Minneapolis
Bailey Nurseries, J. V., Daytons Bluff Station, St. Paul 6
Baker, Harry Franklin, 2929 Emerson Ave., S. Minneapolis 8
Bergeson Nursery, Fertile
Bush's Nursery, 3948 15th Ave. So., Minneapolis
Cashman's Nurseries, Inc., Owatonna
Castle Rock Nursery, Castle Rock
Coupanger, W. A., Elmore Nurseries, Elmore
Daniels Nursery, The, Long Lake
Ferndale Nursery, Askov
Fillmore County Nursery, Canton
Guy's Hillcrest Nursery, St. Cloud
Hulla Nursery, 5200 Willson Rd.
Homedale Nursery, Rt. 1, Hopkins
Howard Lake & Victor Nurseries, Howard Lake
Hoyt Landscape Nursery, Snelling Ave., No. and Roselawn, St. Paul 8
Jewell Nurseries, Inc., Lake City
Killmer's Northern Nurseries, 1700 West Larpenteur Ave., St. Paul 8
Lake City Nurseries, Inc., The, Lake City
Miller's Seeds Co., 172 E. 10th St., St. Paul 1
Mitchell Nursery Co., Owatonna
Owatonna Nursery Company, Inc., Owatonna
Park Nurseries, The, Holm & Olson, Inc., 20 W. 5th St., St. Paul 2
Peters Evergreen Nursery, Sherburn
Red Wing Nursery, Rt. 2, Red Wing
Rose Hill Nursery, St. Paul 8
Ruedlinger Nursery, Texas Ave. and West 35th St., St. Louis Park, Minneapolis 16
Summit Nurseries, Stillwater
Swedburg Nursery, Battle Lake
Thomsen Nursery & Lawn Service, 4108 Nawadaha Blvd., Minneapolis
Warren Nursery Co., Inc., 216 East School St., Owatonna
Wedge Nursery, Albert Lea

Mississippi

Bealle—Nurseryman, J. B., Greenwood
Bell Nurseries, Charles J., Greenwood
Bradford's Wayside Nurseries, Halstead Rd., Ocean Springs
Brents Nursery, Rt. 6, Jackson
Chinquapin Farm, Ocean Springs
Harkins Florist & Nursery, Jackson
Miller Nursery, A. P., 503 So. 6th St., Columbus
Owen & Son, T. G., Box 946, Columbus

Missouri

Ambo Bros. Nursery, 8619 Kingsbury Ave., St. Louis
Blue Ridge Nurseries, Blue Ridge at 54th St., Route 3, Kansas City
Chandler Landscape & Floral Co., 101 W. 47th St., Kansas City 2
Cloverset Flower Farm, 105th St. and Broadway, Kansas City 5
Forrest Keeling Nursery, Elsberry
Gern Nursery, 9336 Tesson Ferry Rd., Affton 23
Houlihan Nursery Co., Creve Coeur 5
Jackson Landscape Co., 3312 E. 43rd St., Kansas City 4
McGovern Nursery, 1158 Hawood Rd., St. Louis 22
Midwest Nursery, 6034 Troost Ave., Kansas City
Neosho Nurseries Co., Neosho
Nichols Investment Co., J. C., 310 Ward Parkway, Kansas City 2
Ozarks Plant Farms, Inc., R. F. D. 3, Box 317, Springfield
Rosehill Gardens, 93rd and Holmes St., Kansas City 5
Sarcoxie Nurseries, The, Wild Bros. Nursery Co., Sarcoxie
Sessen, Geo. H., Howell Co. Nursery, West Plains
Sims Fruit & Nursery Farms, Hannibal
Stark Bros. Nurseries & Orchards Co., Louisiana
Waldbart & Sons Nursery Co., A., Natural Bridge and Hunt Rds., St. Louis 21
Westover Nursery Co., 8100 Olive St., Rd., University City 5
Wilkerson Nursery, Highway 40, West, Columbia
Williams & Harvey Nurseries, Box 7068, Country Club Station, Kansas City 2

Nebraska

Baldwin & Co., C. E., 3118 California St., Omaha
Campbell's Nurseries, 3600 J St., Lincoln
Davidson Nursery Co., Hastings
Geneva Nurseries, Guy A. Brown, owner, Geneva
Haggerty, J. B., 1726 S. 51st St., Lincoln
Jensen Nursery, Chappell
Madison Nursery, Madison
Marshall Nurseries, Arlington
Nebraska Nurseries, Inc., 4815 "O" St., Lincoln 8
Paulsen Nursery, Minden
Plumfield Nurseries, 2105 N. Nye Ave., Fremont
Williams Nurseries, 1742 N. 48th St., Lincoln 4

New Hampshire

Hughes Nurseries, Peter, 149 Mt. Vernon St., Dover
Williams Nurseries, Charles H., Box 223, Exeter
Williams, Isaac Langley, Exeter
Williams Nursery Co., Inc., L. E., P. O. Box 147, Brentwood Road, Exeter

New Jersey

Bergmann Nurseries, Inc., Otto, Midland Ave., Paramus
Blair's Nurseries, Inc., 671 Centre St., Nutley
Bobbink & Atkins, East Rutherford
Bosenberg, Henry F., New Brunswick
Circle Greenhouses, P. O. Box 208, Little Falls
Clifton Nursery, R. F. D. 1, Mt. Prospect Ave., Clifton
Corradi, Adolpho, 76 Ashwood Ave., Summit
Crelin, A. L., 110 Overlook Terr., Bloomfield
Cumberland Nursery, Wm. Wells & Sons, Props., R. R. 1, Millville
Deerfield Nurseries, Box 32, Deerfield
Delaware Valley Nursery, 948 N. Broad St., Elizabeth
Deverman, Harry, 1473 Van Houten Ave., Clifton
de Wilde's Rhodo-Lake Nurseries, Shiloh
Dirkmaat Azalea Farm, 516 Stevens Ave., Ridgewood
Donbert Nurseries, East Main St., Mendham
Dono Brothers, Box 107, Chatham
Dummett, Arthur, Bernardsville
Ehrle Nurseryman & Florist, George L., R. D. 1, Broad St., Clifton
F & F Nurseries, Springfield
Glen Echo Nurseries, Andover
Great Notch Nursery Market, 751 Valley Rd., Clifton
Grootendorst, Gerard, Oakland
Hackettstown Nurseries, Inc., Hackettstown
Hess' Nurseries, P. O. Box 52, Mountain View
Hoverman Nurseries, Inc., Paul, Fairview Ave., Paramus
Jacobus & Son, C. R., 104 Alexander Ave., Upper Montclair
John Bunny Farms, Route 6, Little Ferry
Johnson's Nursery, Box 113, Mandeville Ave., Pequannock
Kievit, C. A., 755 Lincoln Ave., Hawthorne
Koster Company, Inc., C. Courtney Seabrook, Bridgeton
Leach's Nursery, Riverton
Levick Nursery Co., The, R. D. 3, Bridgeton
Lovett's Nursery, Inc., Little Silver
Maple Grove Nursery, Montville
McNaughton's Nurseries, Kresson Rd., Haddonfield
Meadow Brook Nurseries, Inc., Englewood
Miller Co., Wm. M., Hamburgh Turnpike, Paterson
Princeton Nurseries, Princeton
Ribsam Nurseries, Inc., P. O. Box 100, Trenton 1
Ritchie, Walter M., R. D. 2, Box 112 R, Rahway
Schmidt & Sons, Inc., J. H., Milburn
Somerset Rose Nursery, Inc., P. O. Box 608, New Brunswick
St. Cloud Nurseries, West Orange
South Mountain Nurseries, 120 Milburn Ave., Milburn
Suburban Nurseries, Littleton Rd., Morris Plains
Turner Bros. Nursery, West Long Branch
Verkade's Nurseries, Inc., J. Verkade, Prop., Paterson
Zegers, Engel M., Box 142, Mountain View

New Mexico

Clovis Nursery, South Prince St., Clovis
Dwarf Fruit Nurseries, 3649 Glendale Rd., Albuquerque
New Mexico Nurseries, Route 3, Clovis

New York

Auld's Garden Shop, 8434 Delaware Ave., Kenmore
Avenue Landscape Service, The Carl C. and Roeder P. Kinkel, 2201 Kensington Ave., Snyder 21
Bagatelle Nursery, F. Williams, Mgr., Huntington Station, Long Island
Baker, Bert, Hoosick Falls
Barnard Florist and Nurseryman, Claverack
Bernath's Nursery, R. F. D. No. 3, Poughkeepsie
Bilmar Nurseries, Pleasant Valley
Blossom Knoll Nurseries, Scarsdale
Brooks' Bros. Nurseries, Monroe
Bronx Terminal Plant & Flower Market, E. 149th and River Ave., Bronx
Brown Bros. Co., Rochester 10
Bulk's Nurseries, Inc., Babylon, Long Island
Bushnell Nursery, E. C., 115 Englewood Ave., Syracuse 7
Chase-Pitkin Nurseries, Inc., 2045 East Ave., Rochester 10
Cobb's Nursery, Cobb's Hill, Poughkeepsie
Congdon Nursery, H. E., North Collins
Cook Nursery, S. J., R. F. D., Dunkirk
Cottage Nursery, The, Johan H. Witte, Niskayuna
Curtis Company, The Chas. G., Callicoon
Dalsimer, Inc., 576 Central Ave., Cedarhurst, N. Y.
Dauernheim, Inc., Wantagh & Jerusalem Ave., Wantagh, Long Island
Dunn, John, 64 Hillside Ave., West White Plaines
Empie's Highland Nurseries, Box 18, Union Ave., Johnstown
Eureka Nursery, Hicksville, Long Island
Flower City, Inc., East Rochester
Foster Nursery Co., Inc., Fredonia, Region 1, Zone 14
Garden Center, 165 Riverside Drive, Johnson City
George & Son, James I., Fairport
Green Valley Nursery, Saw Mill River Rd., Hawthorne
Guernsey & Co., Inc., F. A., Schoharie Nurseries, Schoharie
Hart & Vick, Inc., 55 Stone St., Rochester
Hart's Nurseries, Lynbrook & Wading River, Long Island
Hartsdale Nurseries, Wm. H. Baden, Central Park Ave., Hartsdale
Hicks Nurseries, Inc., Westbury, Long Island
Hillside Farm Nurseries, Burton F. Park, owner, Park Lane, White Plains
Hutchinson Nursery, 80 Hutchinson Blvd., Scarsdale
Jackson & Perkins Co., Newark
Kelly Brothers Nurseries, Dansville
Labrioln, Lawrence, 68 Gaylor Rd., Scarsdale
Land O'Trees Landscape Service, 1042 Wehrle Drive, Williamsville
Lewis & Valentine Landscape Corp., 145 Post Rd., Rye
Lewis & Valentine Nurseries, Inc., Northern Boulevard, Roslyn, Long Island
Maloney Bros. Nursery Co., Inc., Dansville
Maxwell, Bowden & Rice, Inc., Geneva

Mayo's Beverly Nurseries, Pittsford
McNair Nurseries, C. W., Dansville
Mennes Nurseries, Menno S., R. D. 1, Falls Blvd., No. Tonawanda
Mouquin, Inc., Eugene Henri, Glen Head, Long Island
Noonan's Nursery, 79 Sunrise Highway, Lynbrook, L. I.
Northport Nurseries, S. Scherer & Sons, Northport
North Shore Landscape Co., Inc., Glen Head, Long Island
Oak Park Nurseries, East Patchogue, Long Island
Poughkeepsie Nursery Co., Inc., P. O. Box 1178, Poughkeepsie
Raven Rock Nurseries, Saw Mill River Road, East View
Roberts Nursery Co., Dansville
Rosedale Nurseries, Howard C. Taylor, East View
Rynalski Nursery, K. F., Box No. 145, Fredonia
Salisbury Nursery, East Hempstead, Long Island
Sammis, G. Clifton, West Main Street, Huntington, Long Island
Schifferli & Son Nurseries, The, F. E., Fredonia 2
Schrakamp Nurseries, Leo, 56-38 210 St., Bayside, L. I.
Shepard Nurseries, Skaneateles
Sheridan Drive Nursery, 2202 Sheridan Drive, Kenmore
Smith Corporation, W. T., Geneva
Springdale Nursery, Montour Falls
Stedman Nurseries, The, Newfane
Stern's Nurseries, Geneva
Stuart & Co., Inc., C. W., Newark
Syosset Nurseries, Inc., The, Jackson Avenue, Syosset
Toy Nursery, Howard, 3571 Sheridan Dr., Buffalo 21
Ullyette Brothers' Nursery, Dansville
Van Auken Nurseries, E. J., Dansville
Vermeulen & Son, Inc., John, P. O. Box 411, Westbury, Long Island
Visser's Nurseries, Springfield Gardens 13, L. I.
Volino, Salvatore, South Road, Poughkeepsie
Vorndran Nursery, August, 1062 Ridge Rd., Webster
Wayside Nurseries, Mineola, Long Island
Wevers Nurseries, Deer Park Ave., Babylon, Long Island
Wheelock & Turnbull, R. D. 2, North Collins
White Nursery Service, Mecklenburg
Zerfass Nurseries, Dansville

North Carolina

Anthony Lake Nursery, Pincola, Avery County
Boxwood Gardens, Box 590, High Point
Butler Nurseries, Route 7, Fayetteville
Campbell, Walter E., 695 Percy St., Greensboro
Goldsboro Nursery, R. L. Casey, Prop., Rt. 1, Goldsboro
Harkey Bros., Nurseries, Inc., Harris Rd., Charlotte 7
Hayes Nursery, Route 5, Charlotte
Howard-Hickory Co., The, Hickory
Lindley Nurseries, Inc., Greensboro
Mecklenburg Nurseries, Inc., Charlotte 2
Meroney Nursery Co., Box L, Mocksville
Nettlewood Nurseries, Route 2, Asheville
North State Nursery Co., Julian
Orton Nursery, R. F. D., Winnabow
Shoaf's Plant Farm, Lexington
Tinga Nursery, Castle Hayne

North Dakota

Christianson Landscape Service, P. O. Box 244, Fargo
Fargo Nurseries, The, 1129 8th Ave. So., Fargo
Hankinson Nursery Co., Hankinson
Northwest Nursery Co., Valley City
Owens Floral Co., Paul, Grand Forks
Will & Co., Oscar H., Bismarck

Ohio

Allen Nurseries & Seed House, Geneva
Athey Nursery, I. Bohlender, R. R. 2, Box 196-B, Tipp City
Beach Cliff Nursery Co., 19825 Lake Road, Rocky River 16
Berryhill Nursery Co., The, Box 696, Springfield
Bohlender Nurseries Co., Tipp City
Boulevard Gardens, 370 N. Sandusky St., Columbus
Brick Nurseries, L. P., Painesville
Brooks Nurseries, Van Wert
Burton's Hilltop Nurseries, Canstown
Burwell Nurseries Co., The, 4060 E. Main St., Columbus 9
Call's Nurseries, Perry
Carr's Sons, M. L., Yellow Springs
Cassinelli, Peter, Prop., Glendale Nurseries, Princeton Pike and Kemper Road, Glendale
Champion Nurseries, Perry
Clyde Nursery Co., The, A. R. Pickett & Son, Clyde
Cole Nursery Co., The, R. 1, W. Jackson St., Painesville
DeGraw's Rainbow Nursery, 5022 N. High St., Columbus 2
Don's Rainbow Gardens, Orrville
DuBois & Son, Wilbur, 6938 Miami Rd., Cincinnati 27
Fremont Nursery Co., The, H. S. Day, owner, Fremont
French Nursery Co., Clyde
Ghent Ridge Nursery, Claire App, owner, 35 Marvin Ave., Akron 2
Hagedorn Nursery, W. J., 701 Wyoming Avenue, Cincinnati 15
Halderman's Nursery, R. 1, Tipp City
Heitmeyer Nursery, Elmer, R. R. 10, Box 169, Cincinnati 27
Hollandia Garden, The, South Vienna
Imlay Company, The, 54, N. 5th St., Zanesville
Jenkins Nurseries, The, E. M. Jenkins, Prop., Winona
Kallay Bros. Co., The, Painesville
Klyn, Gerard K., Mentor
Kohankie & Son, Henry, Painesville

PRIZE WINNER for the second time in the selections of roadside properties that contribute to highway beautification is the Drive-In, Union, New Jersey. A committee of the Garden Club of the State of New Jersey and the State Highway Department presented it with a Citation Award for its gracious, clean-cut, and unusual natural appearance gained through the shrewd planting of an appropriate foundation area.



Lakewood Nursery, 17920 Detroit Ave., Lakewood 7
Leonard's Nurseries, Piqua
Loose Nursery, C. M., 3300 Philadelphia Dr., Dayton 5
Mahlstede Bros., Wilson Mills Road, South Euclid, Cleveland 21
Martin Perennial Nurseries, Joseph F., Box 189, Painesville
Natorp Co., The W. A., 4400 Reading Road, Cincinnati 29
North Ridge Nursery, R. D. No. 3, Elyria
Oberlin Nursery, 166 Woodland Ave., Oberlin
Offenberg Nurseries, Paul, 3415 E. Livingston Ave., Columbus 9
Oregon Nursery, 418 Forest Drive, Rossford
Peacock Nursery, William H. Krekler, owner, U. S. 21, R. D. 7, Akron 3
Pendale Nurseries, Auburn Centre, Mantua
Puritas Nursery, John D. Fiorelli, 19201 Puritas Ave., Cleveland 2
Scarff's Sons, W. N., Route 3, New Carlisle
Segelin's Flower Center, 9010 Carnegie Ave., Cleveland 6
Siebenthaler Co., The, 3001 Catalpa Drive, Dayton 5
Slemmons Gardens, 5256 Olentangy River Rd., Worthington
Springbrook Gardens, U. S. Route 20, Mentor
Stonewall Gardens Nursery, R. D. 5, Box 20, Kent
Tri-State Nurseries, Box 191, Ironton
Vandervoort, P. C., New Antioch Nurseries, Wilmington
Wade & Gatton Nursery, Bellville
Wagner, Curtis E., 63 E. Cuyahoga Falls Ave., Akron 10
Wayne Hill Nursery, Route 7, Hamilton
Wayside Gardens Co., The, Mentor
West Flower Garden, Billy, Brookville
Wyant, Melvin E., Rose Specialist, Inc., Mentor
Wyoming Nurseries, C. E. Kern, 34 Vermont Ave., Cincinnati 15

Oklahoma

American Landscape Nursery, 5320 E. 36th St., No. Tulsa
Bellinghausen Nursery, Rt. 1, Ponca City
Capitol Garden Nurseries, 4200 N. May, Oklahoma City
Carter Floral & Nursery, 2600 MacArthur Blvd., Oklahoma City
C. V. Nurseries, J. W. Tetirick, P. O. Box 288, Blackwell
Conard & Son, J. E., Stigler
Goodwin Nursery, Rt. 1, Kingfisher
Higdon Flower Shop & Nursery, Oklahoma City 7
Holland Nursery, 6509 So. Peoria, Tulsa
Hunter & Son, Turley
Jensen & Himes Landscape Company, 2730 S. Harvard St., Tulsa
Kenyon's Nursery, 10th and May Ave., Oklahoma City
Klein Nursery, R. F. D. No. 4, Enid
Mayfair Nurseries, Rt. 4, Box 593, Tulsa
Midwest Nursery Co., 3711 East Admiral Pl., Tulsa
Miller Plant Farm, Seminole
Muskogee Greenhouse Co., Muskogee
Nelson Nursery, Route 3, Enid
Noble Nursery, C. E. Garee, Noble
O. K. Gardens Nursery & Landscape Co., 2020 East 21st St., Tulsa 4
Ozark Nursery Co., Tahlequah
Quality Nursery, 1107 South St. Louis, Tulsa
Rigsby Nursery, F. E., N. E. 21st & Hood, Oklahoma City 5
Schell Nursery, 1249 E. 26th St., Tulsa
Shawnee Nursery, Shawnee
Sneed Nursery Co., Box 798, Oklahoma City 1
Stephens Landscape Nursery, 1236 S. Harvard, Tulsa 4
Tetirick Nursery, P. O. Box 1395, Ponca City
Thomas Landscape & Nursery Co., 4515 S. Peoria Ave., Tulsa 15

Oregon

Beaver Creek Nursery, Gresham
Brookside Azalea & Bulb Farm, Brookings
Carlton Nursery Co., Forest Grove
Doerfler & Sons, F. A., 1120 E. Turner Road, Salem
Doty & Doerner, Inc., 6691 S. W. Capitol Highway, Portland 1
Drew's Ilex Nursery, P. O. Box 344, Beaverton
Enschede Nursery, W. J., 801 S. 7th St., Hillsboro
Ferrill's Nursery, 1315 Chemawa Rd., Salem
French, J. E., 5927 N. E. 52nd Ave., Portland 13
Henny & Brydon, Box 212, Brooks
Holgate Nursery Co., 4531 S. E. 26th Ave., Portland 2
Lafayette Nursery Co., Lafayette
Laing's Nursery, 14923 S. E. McLoughlin Blvd., Portland 22
Lamb's Nursery, 260 N. E. Rockwood Rd., Portland 16
Lewis & Simpson, Troutdale
McGill & Son, A., Fairview
Milton Nursery Co., Milton
Moller's Nursery, Fairview
Motz Bros. Nurseries, Box 42, Orenco
Mountain View Floral Nurseries, Inc., Route 2, Troutdale
Moyer Nursery, C. E., Roseburg
Orenco Nursery Co., B. P. Mitchell, Prop., Box 10, Orenco
Pacific Coast Nursery, Inc., 2244 N. Skidmore Court, Portland 11
Pacific Native Nurseries, Inc., 6100 N. E. Killingsworth, Portland 13
Parkrose Landscape Nursery, 10815 N. E. Sandy Blvd., Portland 20
Pearcy Nursery Co., H. L., Route 2, Box 190, Salem
Pearcy Nursery, Knight, P. O. Box 12, Salem
Peterson & Derling, Scappoose
Portland Wholesale Nursery Co., (A. H. Steinmetz) 306 S. E. 12th Ave., Portland 14
Radovich Nursery, 140th Ave. and S. E. Foster Rd., Portland
Rich & Sons Nursery, Route 4, Hillsboro
Roseway Nurseries, 4228 N. E. 77th Ave., Portland 13
Ruff, Max, 12934 S. E. Claybourne, Portland 6
Saxton & Wilson, Maplewood
Schmidt & Sons, J. Frank, Route 2, Box 211, Troutdale
Sherwood Nursery Co., 141 S. E. 65th Ave., Portland 16
Stout's Nursery, Route 4, Box 315, Hillsboro
Surface Nursery, Route 1, Gresham
Teufel Nursery, Geo., Route 5, Box 450, Portland
U. S. Espalier Nursery Co., Inc., Sherwood
Van Hevelingen, N., 3870 N. E. Glisan St., Portland 13
Van Veen Nursery, 3127 S. E. 43rd Ave., Portland 6
West Hills Nursery, 10108 N. W. Cornell Rd., Portland 1
Willamette Nursery Co., 8512 S. E. 57th Ave., Portland 6
Wilson's Evergreen Nursery, Rt. 1, Box 695, Corvallis
Woodruff Cash Nursery, P. O. Box 743, Eugene

Pennsylvania

Adams County Nursery & Fruit Farm, The, Aspers
Alanwold Nursery, Neshaminy
Albrecht Nurseries, John, Narberth
Andorra Nurseries, Inc., Ridge Ave. and Butler Pike, Conshohocken
Appalachian Nursery, Fairview Ave., Waynesboro
Barclay, Hugh B., 1268 Montgomery Ave., Narberth
Barr & Son Nurseries, The B. F., R. D. No. 2, Marietta Pike, Lancaster
Blue Ridge Nursery, D. Guldemond, R. D. 3, Harrisburg
Burnett's Nurseries, Inc., Limekiln Pike, Dresher
Busch Nurseries, Inc., R. D. 1, Thompson Run Road, Allison Park
Cacoosing Nurseries, Sinking Springs
Cashtown Nurseries, Cashtown
Cheltenham Evergreen Nurseries, 550 Cottman St., Cheltenham
Coles-Righter Co., 298 So. Easton Road, Glenside
Conard-Pyle Co., The, Robert Pyle, president, West Grove
Dauber's Nurseries, 1705 North George St., York
DeKalb Nurseries, P. O. Box 67, Norristown
Eisler, John M., 219 E. Pearl St., Butler
Enterprise Nurseries, Walter F. Stein & Sons, R. D. No. 1, Wrightsville
Erb Bros., Landscape Gardeners, Lititz Pike No. 3, Lancaster
Fairview Evergreen Nurseries, Fairview, Erie Co.
Farr Nursery Co., Weiser Park
Fischer Nursery, Box 36, Bakerstown
Gass Co., John, Landscape Contractors, 625 Gettysburg St., Pittsburgh 6
Hall's Nursery, 1100 Wyoming Ave., Forty Fort
Harbor Creek Nurseries, Harbor Creek
Heasley's Nurseries, R. No. 3, Freeport Rd., Butler
Hinn & Co., M. W., Box 267, Sewickley
Kettle Nursery, Kettle Road, Box 266, Route 3, Altoona
La Bar's Rhododendron Nursery, Stroudsburg
Lancaster County Nurseries, David S. Herr, Prop., R. F. D. 6, Lancaster
Leonard & Leonard, Landscape Architects, 241 S. Pacific Ave., Pittsburgh 24
Meehan Co., Inc., Thomas B., Montg. Co., Dresher
Meehan & Sons, Inc., J. Franklin, Germantown Pike (Rt. 422), Plymouth Meeting
Moore & Sons, F. D., 818 Summit Ave., Narberth
Morse & Morse, 1204 E. Washington Lane, Germantown, Philadelphia 38
Musser Forests, Inc., 515 Philadelphia St., Indiana
Paramount Nurseries, A. and A. D. Vanderknaats, Props., West Grove
Pittsburgh Landscape Design & Service, 5624 Broad St., Pittsburgh 6
Pitzonka's Pansy Farm, Box 211, Bristol
Pontz & Son, C. E., R. D. 2, Lancaster
Pride, Orlando S., Nurseryman, 445 No. Bluff St., Butler
Quality Nurseries, R. F. D. 1, Allenwood 3
Reagan's Garden Service, Homestead
Reinhold, E. C., R. D. 1, Elizabeth
Rickert Nurseries, Box 120, Morrisville
Root's Landscape Service, Manheim
Root's Nurseries, Inc., R. D. 1, Manheim
Rose Valley Nurseries, Moylan-Rose Valley
Schwoebel, Richard, 20 N. Haverford Ave., Ardmore
Shiloh Nurseries, R. D. 1, York
Slaybaugh Bros. Nursery, R. D. 2, Aspers
Southampton Nurseries, The, Second Street Pike, Southampton
Squirrel Hill Nursery, 2945 Beechwood Blvd., Pittsburgh 17
Stokes, Warren E., R. D. 6, Butler
Strehlow, Harold E., P. O. Box 1, Troutville
Styer's Nurseries, J. J. Styer & Son, Concordville
Thomas & Sons, Jos. W., King of Prussia
Upper Bank Nurseries, Inc., Media
Valley Forge Arborist, R. D. 1, Phoenixville
Vick's Wildgardens, Glen Moore
Walter, Nisley & Walter, Inc., Box 773, Harrisburg
Worley's Nurseries, Chester B. Worley, Prop., Route 1, York Springs
Wyoming Valley Nursery, 84 Atherton Ave., Wyoming

Rhode Island

Aquidneck Nurseries, Coggeshall Ave., Newport
Boulevard Nurseries, Kempenaar & Christensen, Prop., W. Main Road, Newport
Brownell Roses, Little Compton
Cedarhurst Nurseries, Inc., 3044 Pawtucket Ave., East Providence
East Providence Nurseries, P. O. Box 121, East Providence 14
Forest Hill Nurseries, Inc., 1073 Reservoir Ave., Cranston 10
Greenwood Nurseries, Inc., 243 Post Road, Greenwood
Hoogendoorn Nurseries, Newport
Rhode Island Nurseries, The, V. J. Vanicek, Newport
Stewart Nursery Co., Wakefield
Tweed Nurseries, J. S. & B., Jamestown

South Carolina

Boxwood Manor Nursery, Sandy Springs
Easley Nursery, Box 306, R. 3, Easley
Frierson's Flowers, Denmark
Gillespie Nurseries, Taylors
Greer Nursery, Greer
Liberty Nursery, Easley
Magnolia Gardens & Nurseries, R. F. D. 2, John's Island
Marvill-dell Nursery, Rt. 1, Simpsonville
Marviray Nursery, 3200 River Drive, Columbia
Millers Evergreen Nursery, Roebuck
Old Fort Camellia and Azalea Nursery, Rt. 4, Charleston
Palmetto State Nursery, Florence
Peach Ridge Farms, Clemson
Shady Grove Plantation & Nursery, Orangeburg
Smith's Nursery, Trenton
Stephenson's Nurseries, Irmo
Taylor Nursery, Augusta Rd., Greenville
Taylor's Nursery, P. O. Box 183, Florence
Watson's Pecanwood Nurseries, 222 E. Russell St., Orangeburg
Willingham, William T., 809 King St., Columbia 35

South Dakota

Dybvig Nurseries, Inc., Colton
Gates Nursery, Rapid City
Gurney's, Inc., Yankton
Hansen Nursery, Carl A., Brookings
Preheim & Co., Chas., Freeman

Tennessee

Baxter Nursery, W. J. Johnson, Prop., Baxter
Blountville Nurseries, Inc., Blountville
Boyd Nursery Co., McMinnville
Braswell Nurseries, Smithville
Cartwright Nurseries, Collierville
Commercial Nursery Co., Decherd
Couch Bros. Nursery Co., McMinnville
Cumberland Valley Nurseries, Inc., McMinnville
Drake Nurseries, E. B., Winchester
Driver's Wholesale Nurseries, McMinnville
Easterly Nurseries, W. A. Easterly, Cleveland
Forest Nursery Co., Inc., Box 311, McMinnville
Haley Nursery Co., Smithville
Hawkersmith Nursery, Ike, Winchester
Howell Nurseries, Knoxville 15
Ideal Nursery & Orchard Co., W. R. Underwood, Prop., R. F. D. No. 1, Smithville
Jones Ornamental Nursery, Hobbs Road, Nashville 5
McIntyre Nursery, Robert, Kilvington Blvd., Nashville 11
Morse Bros., R. F. D. No. 3, Chattanooga 9
Murphy's Nursery Co., P. O. Box 82, Smithville
Pinnacle Nursery, R. 9, Sevierville
Poplar Avenue Nurseries, D. G. Edwards, 3034 Poplar Ave., Memphis
Potter Nursery, The H. R., Joelton
Riverside Nursery, Winchester
Romines Plant Farm, Dayton
Scruggs Nursery, Rt. 7, McMinnville
Shadow Nursery Co., Winchester
Slatton Nursery Co., McMinnville 5
Southern Nursery & Landscape Co., Winchester
Sunbeam Nursery, 105 McBrien Rd., Chattanooga
Tennessee Nursery Co., Cleveland
Tennessee Valley Nursery, Winchester
Tibbs Nursery, C. V., 3702 Nolensville Rd., Nashville 11
Tritschler's Greenhouses, 4425 West Lawn Drive, Nashville
Washington Heights Nurseries, Box 3065, Station A, Knoxville 17

Texas

Aldridge Nursery, Von Ormy
Allen Nursery & Garden Clinic, Manelll, Houston
Arp Nursery Co., P. O. Box 867, Tyler
Baker Bros. Nursery, P. O. Box 328, Fort Worth 1
Baker Floral Co., 807 Lamar St., Fort Worth

Barrera's Nursery, Rt. 1, Box 169A, McAllen
Black Nursery, M. H., 510 Decatur Ave., Orange
Bowers Nursery, 2215 Morgan St., Corpus Christi
Bradshaw's, 2623 Broadway, Galveston
Breedlove Nurseries, Route 2, Tyler
Breland, Blish, 1115 W. Abram, Arlington
Bruce Nurseries, Alanreed
Cannon Nursery & Floral Co., H. E., Arlington
Corpus Christi Nursery, 1534 S. Staples, Corpus Christi
Derrick, B. H., Nurseryman, Rt. 7, Box 618, Waco
Derrick Floral & Nursery Co., 1900 Speight Ave., Waco
Dixie Rose Nursery, Tyler
Eubank Bros., Nursery Co., Box 324, Waxahachie
Evergreen Nursery Co., 4501 Alameda Ave., El Paso
Flowerland, Rt. 2, Weslaco
Gray Nursery, O. S., P. O. Box 513, Arlington
Gregory Nursery, P. O. Box 102, Ft. Worth
Grilling Nurseries, P. O. Box 3889, Beaumont
Hill's Nursery, Victoria
House & Sons, L. C., Tyler
Howard's Montopolis Nursery, Austin
Hoyt Nursery, P. O. Box 645, Grapevine
Johnson Nursery, Orange Hgwy., Beaumont
Kershner Nursery, Box 1444, Lubbock
King Nurseries, Box 787, Brownfield
Lacy Nursery, R., Box 47, Longview
La Reunion Fruit Farms, Route 2, Grand Prairie
Lanfry Landscape Co., 204 Melrose Pl., San Antonio
Leverett Floral & Nursery, E. E., 4910 W. Lovers Lane, Dallas 9
Lingner Nursery, San Antonio 7
Locke Poteet Nursery, Poteet
Lone Oak Nursery, 520 Decatur Ave., Orange
Martin's Rose Nursery, Rt. 1, Arp
McGinney Rose Nursery, Route 6, Tyler
Moore Nursery & Floral Co., P. O. Box 756, Tyler
Mosty Bros., Box 843, Center Point
New Braunfels Nursery & Floral Co., P. O. Box 418, New Braunfels
North Tyler Nursery, Route 1, Tyler
Pletchers Florist & Nursery Co., Harlingen
Proffer & Woolfolk Nursery, Rt. No. 3, Gainesville
Rainey's Pecan Nursery, 2714 N. Chadbourne St., San Angelo
Ramsey's Austin Nursery, Austin 22
Rose City Nursery (Southern States Nursery), 204 Keeling Bldg., Tyler
Rosemont Nurseries, A. L. Thompson, Box 839, Tyler
Sarver Nursery Co., Box 7062, Dallas 9
Scherz Nursery, 216 E. Avenue K, San Angelo
Shamburger Nursery, Carl S., 4 miles north Dixie Highway, Tyler
Sinton Nursery, Sinton
Skelly Nursery Co., Port Arthur
Southland Rose Nurseries, P. O. Box 591, Tyler
Storm Nursery, Alice
Stuart Nursery, Desdemona 5
Texas Nursery Co., Inc., 4400 Bellaire Blvd., Bellaire
Texas Floral Company, 2107 21st St., Lubbock
Texas Nursery Co., Sherman
Thompson-Hills Landscape Co., Rt. 2, Tyler
Trauernicht Nursery Co., 400 North Sylvania Ave., Fort Worth 3
Twitty Nursery, P. O. Box 777, Texarkana
Tyler, A. C. P., 1701 Liveoak, Beaumont
Verhalen Nursery Co., Scottsville
Vermay Nursery Co., R. 2, Tyler
Wolfe Nursery, Stephenville

Utah

"Edgewood Hall Nursery," Providence
Forest Hills Nursery, 3736 Highland Drive, Salt Lake City 5
Kirkland Nursery Co., Bountiful
Mt. Olympus Nursery, 4711 Holladay Blvd., Salt Lake City
Pines Landscape Nursery, The, P. O. Box 72, Centerville
Porter-Walton Co., 522 South 3rd, West, Salt Lake City 1
Wildwood Hollow Farm Nursery, R. F. D. No. 1, Box 506A, Provo

Vermont

Gardenside Nurseries, Inc., Shelburne

Virginia

Bloxom & Son, J. C., R. F. D. 3, Hampton
Blue Ridge Gardens, R. R. 4, Box 296, Roanoke
Campbell's Native Nursery, Box 451, Franklin
Christian & Co., I. T., 8 Park Place, Portsmouth
Coleman Nursery, Rt. 1, Box 70, Portsmouth
Colonial Farms, Inc., 2016 Sledd St., Richmond
Edgewood Nursery, 45 Parrish Rd., R. F. D. 1, Box 499, Robbins Corner, Norfolk
Gresham's Nursery, Midlothian Pike, R. F. D. 9, Richmond 24
Gulf Stream Nursery, Inc., Wachaprengue
Hedge Lawn Nursery, Inc., R. R. 2, Roanoke 12
Hood & Co., W. T., Richmond
Laird's Nursery, R. F. D. 2, Richmond 21
Le Couteur's Nursery, P. O. Box 178, Fredericksburg
Le-Mac Nurseries, Kenneth McDonald, owner, Box 421, Hampton 1
Little Tree Nursery Farm, Rt. 1, Roanoke
Misenheimer, Walter H., Green Acres Farm Nurseries, P. O. Box 666, Portsmouth
Norfolk Garden Center, 924 W. 21st St., Norfolk
Royal Oak Farms, Marion
Snow's Nursery, 511 Carlton Ave., Charlottesville
Southside Nurseries, Richmond
Tankard Nurseries, The, Exmore
Vadma Nursery Agency, Hideaway Rd., R. F. D. 1, Fairfax
Watkins Nurseries, Midlothian
Waynesboro Nurseries, Inc., Waynesboro
Williams, J. O., 3650 Hermitage Rd., Richmond 22
Williams & Harvey Nursery, 3504 W. Cary St., Richmond 21
Winn Nursery, Inc., 1531 Blandford Circle, Norfolk 8
Wood-Howell Nurseries, Inc., Lee Highway No. 11, Bristol
Yeatts Nursery, Martinsville

Washington

Aves Blueberry Farm, 1501 13th St., S. E., Puyallup
Balzer Nurseries, C. Norb, E. 2312 Sprague Ave., Spokane 15
Bonneybrook Nursery, Rt. 2, Bothell
Briggs Shrubbery, 3022 N. Division St., Spokane
Buckley Nursery Co., Buckley
Campus Nursery, Inc., 5000 25th Ave., N. E., Seattle 5
Chenoweth's Mount Vernon Nursery, Mount Vernon
Chervenka, Inc., Frank, Sumner
Columbia & Okanogan Nursery Co., Wenatchee 1
Firth Nursery, 7244 Pacific Ave., Tacoma 4
Five Corners Nurseries, 15844 1st Ave. South, Seattle 88
Hopkins Nursery, Rt. 2, Bothell
Janish & Son Nursery, 2709 N. W. Blvd., Spokane 12
Kelly Plant Gardens, E. 4100 Sprague Ave., Spokane 15
Kent Nursery, Rt. 2, Box 2036, Kent
Krause Nursery, E. 3900 Sprague Ave., Spokane 15
LeBlanc Gardens, Rt. 3, Box 71, Kent
Lynden Rose Nurseries, Box 668, Lynden
Malmo Nurseries, 4700 25th Ave., N. E., Seattle 5
May Nursery Co., Box 494, Yakima
Mayhan Nursery, Veradale
Miethke's Nursery, Route 2, Box 187, Tacoma
Morrison Nursery, Charles, Rt. 1, Zillah
Mountain Meadow Nursery, Monroe
Puget Sound Nursery, 9201 Pacific Ave., Tacoma 4
Richmond Nurseries, The, J. W. Adams, Prop., Richmond Beach
Riverside Nursery, Upriver Drive, Rt. 6, Spokane
Roberson, L. N., 1539 E. 103rd St., Seattle 55
South Side Nursery, P. O. Box 66, Kelso
Stanek & Son, S172 Washington St., Spokane 8
State Flower Nursery, Route 2, Bothell
Steward, W. M., Box 104, Maple Valley
Strander Evergreen Nurseries, 13310 Interurban Ave., So. Seattle 88
Tindall's Nursery, R. E., Route 2, Box 100, Bothell
Washington Nurseries, Box 751, Toppenish
Wedgwood Gardens, 7744 35th, N. E., Seattle
Wells Nursery, Mount Vernon

West Virginia

Cole Nurseries, Box 443, Bluefield
Conner & Amos, R. F. D. 5, Box 45, Charleston 1
Dieckmann & Sons, John, Elm Grove
Home Nursery Co., Fort Gay
Larkmead Gardens, Route 4, Parkersburg
Potter Nurseries, B. L., 2717 Fifth Ave., Huntington 3
Sandy Valley Nursery, Box 312, Fort Gay
Wells Farm Nursery, The, Colliers
Wherry's Nurseries, St. Mary's
Young Nurseries, Bickmore

Wisconsin

Albright's Nursery, 7528 Tower Ave., Superior
Antigo Ever-Green Nursery, Antigo
Brown Deer Nurseries, 9160 North Cedarburg Rd., Milwaukee 9
Brown Nursery, W. W., Hartland
Christensen, Milo W., R. 2, Box 573, Racine
Coe, Converse & Edwards Co., The, Fort Atkinson
Edwards Rock River Nursery, Fort Atkinson
Eggleston Nursery, 709 So. 16th St., LaCrosse
Eschrich's Nursery, Station "F," Milwaukee 9
Evergreen Nursery Co., Sturgeon Bay
Fancher's Nursery, Sturtevant
Frantal Nursery, Vincent L., R. 2, Box 864, Kenosha
Gartman's Nursery, Route 1, Fond du Lac
Gerlach Co., Carl, 1110 S. 26th St., Milwaukee 4
Gieringer, Robert H., 5485 Port Washington Road, Milwaukee
Greaves Landscape Co., 6170 North Port Washington Rd., Milwaukee
Green Terrace Nurseries, R. 1, Box 63, Oshkosh
Hawks Nursery Co., The, C. H. Hawks, Jr., 7617 W. State St., Wauwatosa 13
Janovitz Nursery, A., 216 James St., Beaver Dam
Jens Nursery & Landscape Co., Saratoga St., Wisconsin Rapids
Jung Seed Co., J. W., Randolph
Krahn & Son, W. R., 2540 No. 124th St., Wauwatosa 13
Kumlien Nursery, Janesville
Macemon's Inc., So. Lake Shore Hgwy. 42, Racine
McKay Nursery Co., 1919 Monroe St., Madison 5
Mueller, J., Landscape & Tree Service, 3000 No. 75th St., Milwaukee 10
Nekoosa-Edwards Paper Co., Nepco Lake Nursery, Port Edwards
Pippert Evergreen Nursery, Cleveland
Trautman Nurseries, R. R. 2, Box 95, Franksville
Uecke Nursery, The, R. D. 4, Oshkosh
Wayside Gardens, 1630 W. Good Hope Rd., Milwaukee 9
Wetli Landscape Service, Green Bay
White Elm Nurseries, 733 W. Capitol Dr., Hartland

Wyoming

Hartschen Nursery & Landscaping Service, 614 E. 25th St., Cheyenne

Canada

Downham Nursery Co., Ltd., H. C. Strathroy, Ontario
Hogle Nursery Co., Campbellford, Ontario
Layritz Nurseries, Ltd., Victoria, British Columbia
McConnell Nursery Co., The, Port Burwell, Ontario
Prairie Nurseries, Ltd., Estevan, Saskatchewan
Sheridan Nurseries, Ltd., The, Sheridan, Ontario
Toronto-York Nursery Co., 159 Bay St., Toronto, Ont.

Puerto Rico

Pennock Gardens, Box 1179, San Juan, Puerto Rico

MOTHER NATURE often provides very helpful backgrounds that can be put to good advantage through proper design. Here, at the Brunswick Drive-In, New Brunswick, New Jersey, the setting was heavily wooded. A dense fringe of properly trimmed and underbrush-cleared forest was retained as an attractive screen; and wide use of native cedar poles was made in all construction, including the attraction board.



General Maintenance Procedures

Suggestions to Aid the Operator in Waging a Year-Round Campaign Against a Host of Natural Enemies

By EDWARD STANKO AND L. R. WATSON
Manager and Staff Engineer, respectively, Theatre Service Technical Group, RCA Service Company, Inc., Camden, N. J.

BRIEF: *While the major part of the roofed theatre operator's maintenance headaches are caused by foes within, the drive-in operator . . . on the other hand . . . must consistently combat enemies from without . . . Reposing as it does under the canopy of the heavens, the drive-in is open to all the infinite beauties of nature . . . but "the sky's the limit" also as far as destructive natural forces are concerned . . . Wind, rain, heat, cold, etc., constantly descend from above to torment mercilessly the drive-in's grounds, buildings, and equipment . . . while it is counter-attacked from below by insects, dirt, and moisture.*

Since an investment of many thousands of dollars may be lost . . . if these vicious foes are permitted to roll in "Juggernaut" fashion over the drive-in property . . . the operator must combat them constantly with every resource which modern science . . . and his own common sense . . . have put at his command . . . If he does not, he may well have to replace expensive equipment, landscape his grounds again, and overhaul the entire theatre . . . while losing valuable receipts in the process.

The drive-in's war against its enemies, however, cannot be one of sporadic skirmishes . . . There must be a series of daily battles against the legions of nature and its allies . . . with no quarter asked and no quarter given . . . although the tempo of combat will naturally increase in fury at closing and reopening times . . . Only by such determined efforts can the drive-in withstand the many pestilences which continually assail it . . . from every direction.

The following article describes a number of effective protective . . . and preventive . . . methods against the damage and deterioration wrought by time and the elements . . . which naturally come into sharpest focus when the drive-in closes its gates for the winter and reopens them for the season.

Normal wear, tear, and deterioration of buildings, equipment, and accessories during the operation of any business enterprise are expected. However, the drive-in theatre receives more than its share of abuse from many of nature's gremlins that are constantly pecking away, day and night, at the most vital spots of its anatomy.

These gremlins—sun, wind, cold, heat, rain, moisture, dust, oxidation and chemical changes—operate silently, grimly, and with a determined effort. Eventually, they succeed. Fifteen, twenty, fifty, a hundred, or five hundred years make very little difference to these pickpockets. They have a permanent job, and they are always working. They don't even stop for Sundays or holidays—and, most important, you pay for their damaging work!

The purpose of this article is to show the drive-in operator how he can throw a "monkey wrench" into the perpetual plan of these gremlins, and to spread some tanglefoot to slow down their insidious efforts. The best that can be done is to retard the activity of the gremlins, so that a minimum amount of damage is done to drive-in buildings, equipment and investment.

The suggestions given here deal primarily with closing of the drive-in theatre for the winter, but the general principle is the same the year around. If constant attention is given to protecting buildings and equipment from the elements, winter closing will be a much easier task, deterioration will be slower, and the operator will have money ahead.

Speakers and Junction Boxes

While not essential where cast aluminum housings are used, it is preferable to remove in-car speakers and junction boxes (if they are demountable) and store them for the winter in a safe, dry place. Before they are put into storage, they should be carefully inspected and tested. Spots where the finish is scratched or rubbed off should be touched up. This procedure is especially important if the housings are iron or steel and, consequently, subject to rusting. All exposed bare metal which is subject to corrosion should be wiped with a dry cloth, then covered with a film of non-oxide oil or grease. Vaseline is especially recommended for this purpose, as it has been found to be very satisfactory from the standpoint of resisting corrosion; in addition, is easy to remove in the spring, for it does not harden or become gummy.

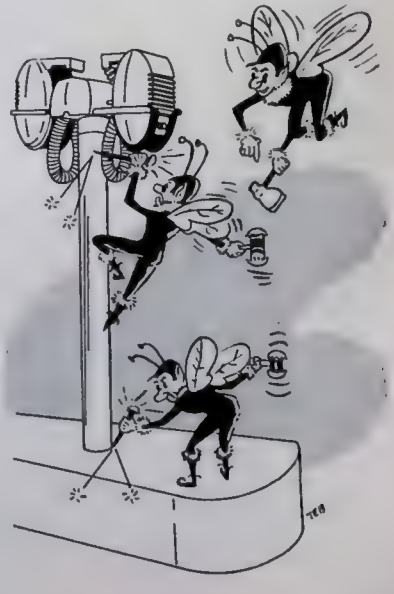
If inspection and test indicate that repairs or parts replacements are required, all possible repairs should be made and all needed parts should be ordered and installed as soon as received. This will eliminate unnecessary delays and confusion at the time of reopening.

It is also preferable to remove and store "underground" and "between-car" speakers if at all possible. They should be prepared for storage as outlined above.

When the junction boxes are removed, it is important that the standards be inspected carefully and any scratches or worn spots touched up, or completely repainted where necessary. If the junction box flanges are removed, threads on both the standards and flanges should be coated with a film of vaseline or other rust-inhibiting lubricant. Then the ramp wiring should be carefully pushed down inside the standard and the opening protected with a secure water and weather-proof covering. If the junction box flanges are removed, a standard pipe cap is possibly the best device for this purpose. Other expedients are water-proof paper, oilcloth, tarpaper or plastic bags tied securely over the opening. Still another alternative is to take empty quart oil cans (procurable from local gasoline stations at no charge), cut off the tops with a can opener, and invert them over the tops of the posts. These usually will last several months before rusting through.

Regardless of which expedient is used, it is important that provision be made for circulation of air to prevent condensed moisture from accumulating inside the standards. If pipe caps are used, they should not be screwed down too tight. If tied-on waterproof covers are used, ventilating holes should be punched at a point where they will not permit moisture to enter the pipe.

In cases where the drive-in operator decides not to store junction boxes and speakers for the winter, it is even more important that they be prepared for the winter as outlined above. After they have been "winterized," it is equally important that a secure water and weather-proof cover be provided. Materials most commonly used for this purpose are water-proof paper bags or moisture-proof paper, such as used in export shipping, which cover the speakers and junction boxes and are tied securely around the standards. In some cases, the speakers and junction boxes are first wrapped in cellophane. Also available on the market





WATERPROOF SPEAKER COVERS from Central States Paper and Bag Company as in use at Ronnie's Drive-In, St. Louis, Mo., by Fred Wehrenberg Circuit. Coverings are weather resistant, easy to install.

are plastic bags, especially designed to slip over the speakers and junction box and tie around the standard. It is again important that any of these coverings be provided with ventilating holes (at a point where they will not permit moisture to enter) to prevent condensed moisture from accumulating inside the covering.

Depending on local conditions, it is sometimes possible to start removing speakers and junction boxes from the rear ramps (or covering the rear ramps for the winter) as soon as the peak of the season is over and attendance starts dropping off as a result of cooler weather. This permits the use of regular theatre personnel for such work at a time when they are not so busy as at the peak of the season.

Ramps, Driveways and Walks

Ramps, driveways and walks should be carefully inspected before closing the drive-in theatre for the winter. Minor repairs such as filling up of small holes, cracks, or other imperfections should be made before frost and freezing weather set in. Repairs made at this time will prevent the damage from spreading, which later might lead to costly repairs.

Where gravel or crushed stone is used, repairs should be made several weeks before closing to take advantage of the late season traffic for packing the repaired sections. Hot asphalt or any other suitable commercial binder should be used to prevent the material from scattering. A covering of sand over the asphalt will prevent it from sticking to the car wheels and carrying the road bed material away.

Lawns, Flower Beds, Shrubbery, etc.

The appearance of the grounds in and around a drive-in theatre can mean the difference between its success and failure. Everyone in show business knows that customers like to patronize a theatre where everything is kept sparkling and refreshing. This is particularly true of a drive-in theatre where the patrons come out for a change of scenery, relaxation, and entertainment.

The lawn, flower beds, and shrubbery are important items around a drive-in. Many of the larger theatres seed or sod part of the ramps around the junction box posts to break up the monotony of the "grounds." The grass also helps to keep the ground cooler. Lawn and sod require careful attention during the hot summer months. In the fall the lawn should be reseeded where necessary, and the spots where the grass does not "take" should be cut out and repaired by replacing the removed section with a good grade of sod.

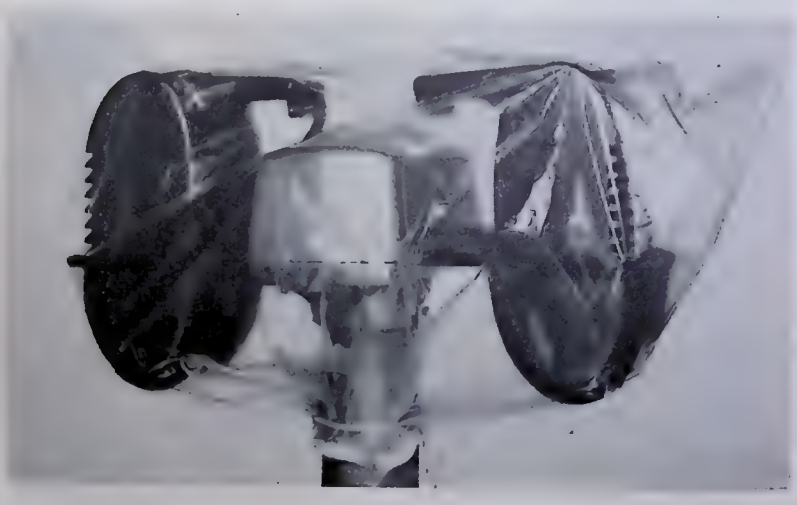
Before reseeding the lawn, unless this work is done by an experienced nurseryman, it is best to consult the local branch of the Department of Agriculture to find out what type of seed should be used. A reliable seed or nursery house can also furnish such information. Some types of grass grow better in some localities than others; in addition, some grasses are of the permanent type, while others are used for a temporary fill-in.

Flower beds and shrubbery should be prepared for winter according to the requirements of the various types of plants. Some will require protective covering, and others will require trimming. Trimming of shrubs should be done by a person experienced in this work, as considerable damage can result if it is not done properly. If such help is not available, the proper information should be obtained from a textbook on this subject or from a reliable source such as the Department of Agriculture. Burlap is used extensively to protect plants and shrubs from severe winter weather.

Fertilizer, ground bone, or lime should be applied where necessary. The type and amount will depend on the variety of plant and the type of soil. A reliable weed killer can be used to great advantage in keeping out unwanted weeds and crabgrass, which crowd out desirable grass, plants and shrubs. Insecticides are valuable for ridding the premises of insects which might annoy patrons or damage lawns, flowers, or shrubbery. During the summer, airplanes have been used to dust or spray the vacant grounds during the daytime. Fertilizer, commercial weed killers, and insecticides are available at most nursery stores. They should be applied by, or under the direction of, an experienced nurseryman, since all of them can do more harm than good if improperly used.

Where theatres are located near swampy areas, or where mosquitos are prevalent, kerosene may be used to cover surface water to prevent further breeding. Local health authorities should be consulted before this action is taken.

CLOSE-UP of a pair of RCA speakers encased in a plastic bag after having been "winterized" for the between season period. It is important that any such cover should contain air holes on the underside.



Booth Equipment

It is preferable, where possible, that all equipment be removed from the projection booth and stored in a safe, dry place, to guard against theft or vandalism, if for no other reasons. If the projection booth is above grade level, or if all major items of equipment are elevated on concrete pedestals above the highest conceivable water level, and if a means of providing a certain amount of heat is available, removal and storage of the equipment is not essential from the standpoint of protection from the elements.

Regardless of whether the equipment is stored in some other place for the winter or left in the projection booth, the following precautions are necessary to prevent deterioration during the closed period: Inspect all painted surfaces carefully and touch up all places where the

paint is scratched or rubbed off. Wipe all bare metal surfaces subject to corrosion with a dry cloth, then cover with a film of vaseline or other non-oxide lubricant. Nickel or chrome-plated surfaces should be similarly treated, for these surfaces may have microscopic pores which would allow moisture to penetrate to the underlying metal and cause the plating to peel.

At this time, all equipment should be carefully inspected and tested. All required repairs should be made, insofar as possible, and any needed replacement parts should be ordered and installed as soon as received, or stored where they will be readily available for installation when the equipment is prepared for reopening.

In cases where all or part of the equipment is left in the booth, such units should be protected by dust and waterproof coverings of fabric or moisture-proof paper, which should extend to the floor and be securely fastened at the bottom to exclude rodents and moisture-laden air. These covers should have ventilating holes, preferably in or near the top, to permit air circulation and prevent condensed moisture from accumulating. All dust and dirt should be blown out of motor generators, brushes should be raised off the commutators (or removed for storage in a dry place), and commutators should be buffed with a canvas pad or crocus cloth until shiny, then covered with a film of vaseline to prevent oxidation. Where water-cooled carbon jaws or apertures are used, be sure the water is turned off and the water pipes and water jackets drained.

Delicate and expensive components such as lenses and reflectors should be removed and stored in a safe place such as the Home Office of the circuit, the manager's residence, etc. Other items such as film phonographs, splicers, rewinds, etc., which could easily be carried away, should also preferably be stored in a safer place. Projector heads may be taken to the theatre supply dealer for cleaning, overhaul if required, and winter storage. Carbons must be stored in a dry place; otherwise they will absorb moisture and will not burn properly.

Arc lamp exhaust chimneys should be removed and stored (in the booth or elsewhere), and exhaust vents should be carefully sealed to keep out dust and moisture. All film and film scraps should be removed from the booth to eliminate fire hazards.

If the booth is below grade level and there is any likelihood of water accumulating from seepage or floods, a sump pump should be provided so accumulated water may be pumped out periodically. If there is any possibility that the water level may rise to a point where it will reach equipment left in the booth, the sump pump should be installed for automatic on and off operation.

It is good practice to provide some form of heating for the booth during the closed season. This will keep the temperature from dropping too low and will minimize condensation of moisture on any equipment left installed. An electric heater, infra-red bulbs, or a number of ordinary light bulbs may be used for this purpose.

A rather thick book would be required to detail the steps to be taken to prepare each item of booth equipment for the winter so the foregoing is, of necessity, more or less general. If any doubt exists about any particular equipment item, it is best to consult the supplier or manufacturer of that item.

Signs, Lights, etc.

It is usually desirable to use attraction boards during the closed period for "Closed for the Winter," "Season's Greetings," or similar messages. They should be inspected carefully and all painted surfaces touched up as required. All metal subject to corrosion should be covered with a film of vaseline or other non-oxide lubricant. It is also advisable to cover the faces of these boards with fine-mesh screen wire as protection from sleet, snow and ice.

Wherever possible, all other signs should be removed and stored in a safe, dry place. If this is not possible, they should be wrapped completely in moisture-proof fabric or paper to prevent glass breakage and chipping of paint. In either case, they should be inspected carefully, any necessary repairs made, and the painted surfaces touched up or repainted where necessary. All metal parts subject to corrosion should be coated with vaseline or other non-oxide lubricant. If complete neon signs cannot be removed for storage, the glass tubing and external transformers should be removed and stored. All electrical terminals left exposed should be wrapped with friction tape. Removable marquee type letters should be repainted if they are scratched or faded.

Ordinary light bulbs should be loosened in their sockets so they will not stick, but should be left in their sockets, where possible, to protect the sockets from corrosion. Where it is necessary to remove bulbs to protect against wholesale theft or vandalism, the sockets should be plugged with corks or covered with a film of vaseline (the power should, of course, be turned off before this is done).

Floodlights should preferably be removed from the moonlight pole, screen tower, and other locations for storage. If this cannot be done, they should be inspected, painted surfaces touched up, and metal surfaces coated with vaseline as necessary, and protected from the elements by weatherproof covers. The lenses should be turned inward away from nearby roads so as not to tempt passing marksmen. Aircraft warning lights required by the CAA should, of course, be kept burning during the closed period.

Box Office and Theatre Office

Because most of the actual business of operating a drive-in theatre is transacted in the business office and boxoffice, these two pivot points of operation will, by the end of the season, have accumulated their share of unnecessary material. Old papers, letters, advertising, and other superfluous odds and ends should be scrapped or burned. Ticket rolls and passes should be removed from the boxoffice, labeled, and stored.

Coin changers, cash registers, ticket machines, and adding machines should be removed, repaired, oiled, and stored in a dry place. Don't leave them out in the open because that will be inviting

SIGN BOARDS should receive special attention in the form of inspection, touch up, and application of a non-corrosive lubricant to all exposed metal parts. Faces of attraction boards can be protected with wire.



trouble from vandals. Don't wait until the reopening day to have this equipment repaired.

If the theatre has a safe, it should be removed and stored, or the safe door left open. A closed safe is an invitation to burglars, even though it may be empty.

Concession Stand

Although a considerable amount of the concession stand equipment is made of stainless steel or other materials that do not rust, there are still many other items that require careful attention.

Drain all hot dog steamers, drink venders, coolers, and coffee urns. Have all metalware shined spotlessly clean. Sort out broken, cracked, or defective glassware, and scrap it. Inspect all utensils, scrap those that are defective or worn beyond repair. Touch up, grease, and repair all other equipment. Pack small items in cartons, barrels, or boxes, and label each container. See that the refrigeration engineer inspects all of the cooling equipment, and adjusts it as per the manufacturer's recommendation.

PROJECTION and confection buildings and their expensive equipment pose one of the most important problems in in-season and out-of-season care.



Cover the remaining equipment with dust-proof covers. Plastic covers are inexpensive and can be obtained at most dime or hardware stores. Assemble in one group all portable stands and wagons. Touch up worn spots with enamel. Grease those parts that are subject to rusting with vaseline. Remove batteries from flashlights and portable lanterns. (Batteries are subject to freezing and chemical deterioration.) Remove all edible foods from the concession stand, as their presence would attract rodents, insects, and vermin.

Building Interiors

The water supply must be turned off (a cutoff valve and drain is usually provided for this purpose at a point below the frost line). All water pipes and plumbing fixtures, including flush bowls and traps, must be drained. Any traps or other fixtures which cannot be completely drained should be filled with a good anti-freeze solution or a strong salt solution.

All interior surfaces should be inspected and touched up or repainted as required. All exposed metal surfaces subject to corrosion should be covered with a film of vaseline or other non-oxide lubricant.

As in the projection booth, any buildings where equipment is stored should be heated to a certain extent to keep the temperature from dropping too low and to prevent accumulation of condensed moisture. Electric heaters, infra-red bulbs, or ordinary light bulbs may be used for this purpose if no other heating facilities have been provided.

Building Exteriors

If the exteriors have been taken care of properly during the season while the drive-in theatre was in operation, the only problem left at the end of the season is to touch up spots where the paint or exterior surface has peeled or cracked. However, if the exterior surfaces are in poor condition, a complete repainting job should be considered. As a general rule, "sprucing up" of the exterior parts of the drive-in should be done in the autumn before freezing sets in, or early in the spring. At either time, there is a minimum of insects and dust to contend with, and a much nicer job results. The screen, screen frame, and fences should also be inspected, any needed repairs made, and touched up or repainted as necessary.

Select paints and resurfacers with care. Don't mix brands if you don't want different shades of color to clash after the paint has dried. Pick out a good brand and stick to the same one for all of the buildings.

Have all building roofs carefully inspected before closing. A leaky roof can cause serious damage to the equipment, or to the building itself. Some roof leaks are difficult to locate, but the time spent in locating a small leak will be well worth the effort.

Concrete block surfaces on which an oil paint has not been applied can be refreshed by using a commercial water soluble paint, or a mixture of white cement and lime which has been thoroughly mixed with water.

All glass surfaces, such as windows and doors that do not have to be used when making winter inspections, should be boarded up to protect them against vandalism and weather.

Auto entrances and exits should be barricaded to keep out trespassing cars. This can be done by setting up a number of empty oil drums across the road, or by erecting a wood barricade made from two by fours. While the use of "No Trespassing" signs might not divert anyone who is bent on burglary, their use is recommended to discourage trespassers from doing damage to the accessible parts of the theatre.

There is nothing more exasperating than to have a key to a lock and then not be able to open the lock. Padlocks should be prepared for the winter by blowing powdered graphite into the lock mechanism. Do not use oil because it has a tendency to gum which prevents the lock from operating smoothly. Coat the outside of the padlocks with vaseline, but do not get any in the key hole. The key hole can be protected by wrapping several layers of surgical or friction tape around the lock to cover up the hole. A tobacco or cloth sack can then be used to cover up the entire lock.

Playground Equipment

Playground equipment should be painted at least once a year with aluminum or asphalt base paint. This should usually be done either in the spring just prior to reopening, or during the winter while the equipment is stored. All equipment not permanently anchored in position should preferably be stored, after it has been inspected carefully, any necessary repairs made, and all exposed metal parts subject to corrosion coated with vaseline or other non-oxide lubricant.

Permanently anchored equipment should be prepared for the winter in the same manner. In addition, since they will be exposed to the full force of the elements, painted surfaces should be touched up or repainted where necessary to prevent deterioration, even though complete repainting is planned in the spring.

Utilities

A very important item in closing or reopening any drive-in theatre is the proper notification of the various public utilities. Power, water, gas, and telephone companies should be notified two weeks to a month in advance. Don't wait until the last day before sending in your notification.

Limited electrical service is usually required to operate lights for aircraft warning signals, electric heaters, and illumination during inspections. This need should be fully explained to the utility representative so that all of the power circuits are not made inoperative.

If more than one telephone extension is used, and the operator still desires to retain telephone service, the remaining extensions can be disconnected by the telephone company until such time as they are required upon reopening.

Water and gas should be shut off, or retained on a limited service basis, depending upon the individual requirements of each drive-in theatre.

Miscellaneous

During the winter months, rats, mice, and other rodents seek entry into the

interior of buildings to protect themselves from the cold weather. Once they have gained entrance, they are in a position to cause extensive damage. If they cannot find any suitable material for building their nests, they will gnaw off insulation from the electrical wiring, and even from paper cases of condensers in the amplifier.

The best protection to keep rats, mice, and other rodents out of the buildings is to make sure that all cracks and holes in the buildings are closed, and that all doors, windows, and other openings close properly. Even when extreme precaution is taken to protect the building and its contents against such damage, a suitable exterminator should be placed at a number of locations inside of the building. And, if the exterminator can be protected so that cats and dogs cannot reach it, it might be wise to place some in several spots around the exterior of the buildings.

When the various parts of equipment, accessories and utensils are stored, a list of contents and box or carton numbers should be kept. This list should indicate the number on the boxes, items in each box and where stored. It is surprising how much easier the task of reopening a theatre will be when the locations of various items and contents of the various boxes are systematically recorded and known when wanted.

Storage Space

Usually the screen tower, concession stand and boxoffice, if dry, will provide satisfactory general storage space for bulky items, such as playground equipment, chairs for walk-in patrons, plumbing fixtures, signs, and the like. Because of possible theft or vandalism, or damage from extremely low temperatures, this space is generally not desirable for more delicate and relatively more expensive equipment (projector heads, soundheads, arc lamps, amplifiers, ticket machines, speakers, etc.), unless provisions can be made for heating and adequate police or watchman protection is available. More secure storage space, such as a commercial storage warehouse or a theatre supply dealer's warehouse, is desirable for such items in most cases.

Inspection

Arrangements should be made to have the theatre inspected regularly during the closed period, the frequency depending on local conditions—about once a week seems to be average. Inspections should consist of a visual inspection of the premises in general to see that there has been no damage by the elements or by trespassers, and of the interiors of buildings where equipment is stored, to be sure that everything is in order. Occasional spot checks of equipment left in the buildings and of speakers and junction boxes left on the ramps should also be made to be sure there has been no tampering, theft, or damage by the elements. Special inspections should be made as soon as possible after severe storms.

In some cases, the services of a full-time watchman living on the premises might prove profitable. This would make it possible to keep all equipment on the premises and still minimize the danger of theft or vandalism. In addition to guarding the premises, much of the watchman's time could be gainfully used on minor repairs, touching up painted surfaces, and other odd jobs.

Insurance

Insurance is one item that you cannot afford to "pass up" without knowing exactly how much and what kind of coverage you are carrying on your theatre. If you are in doubt on coverage, call your local insurance broker and review the entire policy to make sure that you have the proper insurance coverage before closing the theatre at the end of the season.

If part of your equipment is stored in a commercial warehouse, be sure that you receive a policy or receipt indicating that the equipment is insured in an ample amount.

Recently, several insurance companies have made available special insurance policies covering vandalism and theft for closed drive-in theatres. The policies include coverage on junction boxes and in-car speakers.

Lightning Protection

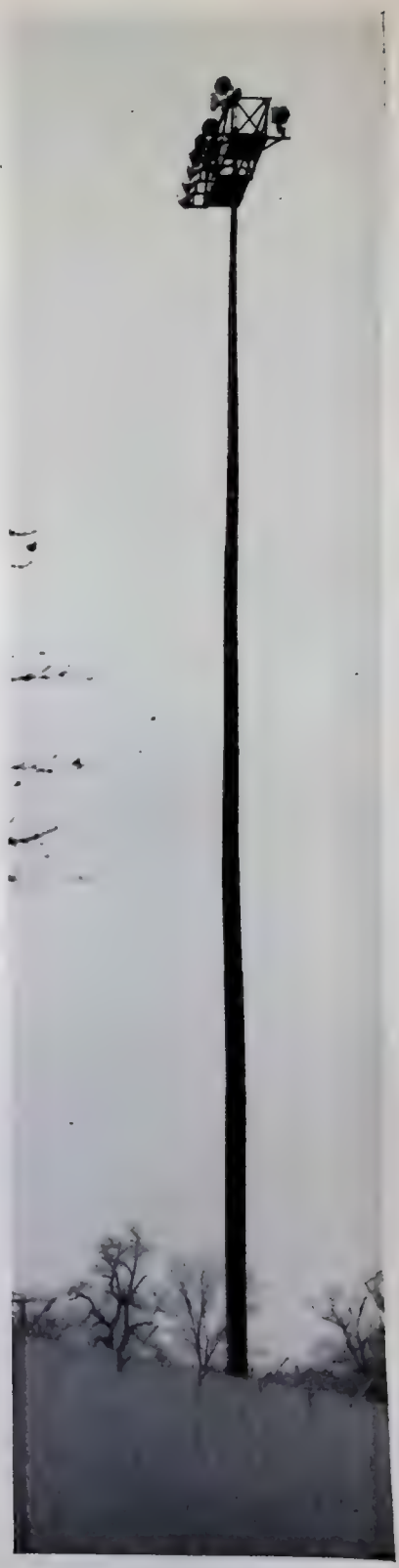
Damage from lightning or a severe static discharge is just as likely to occur during the winter as it is during the summer months, although perhaps not as often. Heavy discharges of static electricity have been known to precede a heavy snow storm by four or five hours. Since it is practically impossible to disconnect all of the electrical fixtures and equipment from the electrical circuits, the best precaution is to have the screen frame, if it is not made of metal, equipped with a lightning rod. If the screen frame is made of metal, be sure that the entire frame has been grounded well.

Metal moonlight poles equipped with a heavy copper ground wire provide an excellent method of draining off static discharges or a direct strike by lightning.

Summary

These suggestions represent a brief summary of years of experience in drive-in operations, as gleaned from field reports, manufacturers' recommendations, published material on the subject, discussions with drive-in operators and personnel, and personal observation. It is not expected that all of them will be applicable in each individual case, but the general ideas are applicable in all cases. Briefly, these general ideas are:

1. Be sure everything outdoors is protected as well as possible against the elements, theft and vandalism.
2. Be sure everything indoors is protected as well as possible against dust, corrosion, floods, theft and vandalism.
3. Be sure all necessary repairs are made at closing or during the winter to prevent deterioration and to avoid delays and confusion at opening time.
4. Consult the manufacturer or supplier when in doubt as to the proper procedure to follow in preparing an item of equipment for the winter.
5. In all cases where contract service applies, give at least several weeks' notice of proposed closing and reopening dates so the assigned service technician will have time to give full supervisory assistance in preparing the sound equipment for closing and reopening.



MOONLIGHTING POLES, if metal and equipped with a heavy copper ground wire provide a by-product in a drain off for static discharges.

Depreciation for Tax and Financing

Two Methods of Computation Now Being Applied by Drive-In Owners While Awaiting Federal Rulings

BRIEF: *Any business which surges upward from humble beginnings . . . and the drive-in theatre is just such an enterprise . . . usually has no great complexity of problems at the start . . . There is generally no great amount of capital investment . . . nor expensive equipment and other property . . . and, therefore, not especial concern over taxes and depreciation . . . The principal aim . . . in the fabled American tradition . . . is to develop the small undertaking into "big business" as rapidly as possible.*

Unlike many new enterprises, the drive-in theatre's climb to the top has taken place in an incredibly short time . . . since its launching some 17 years ago . . . and major growth in the last two years . . . Today hundreds upon hundreds of screen towers dot the landscape in every section of the country . . . to proclaim that the drive-in is here to stay.

But . . . as the drive-in has grown . . . so have its problems . . . Its dazzlingly quick ascendancy into power has startled "old hands" in the motion picture industry itself . . . to the point where too little time has been allowed for serious consideration of the problems which this new Goliath has brought in its wake . . . The question of drive-in bookings . . . for one . . . is still a daily topic of fervent discussion by industry leaders.

The U. S. Government as well has been caught unawares . . . from a tax viewpoint . . . by the rapid growth of the drive-in . . . Capital investment in outdoor theatre properties has swelled from a trickle of thousands to millions of dollars . . . These assets, of course, represent a huge target for federal taxation . . . The question of depreciation allowances, however, is still being pondered by the Treasury Department . . . but, in the meantime, the drive-in must have some yardstick by which to measure depreciation of its investment.

The following article briefly describes two authoritative methods of calculating depreciation . . . pending definite governmental action . . . Although not officially approved, they are reliable enough to provide stopgap solutions to a pressing problem.

Until comparatively recent years the drive-in theatre represented but a small segment of the motion picture industry; thus its problems, especially financial ones, were not a major concern to either the industry itself as a whole, or to the U. S. Government for tax purposes.

Since the war, however, the outdoor theatre business has grown by leaps and bounds to the point where it occupies a formidable place in the very fore of the industry. Although only a handful of drive-ins were in operation before the war, the years which have elapsed since the termination of hostilities have witnessed the construction of nearly 2,000.

This extraordinary growth has been so rapid that the U. S. Treasury Department has not yet reviewed or published any rulings on the calculation of depreciation for tax and financing. This dearth of official legislation on the subject has, of course, been greatly due to the fact that the depreciation on the equipment and other fixed assets of a drive-in theatre differs materially from that of the regular type of motion picture theatre. The principal point of distinction is that certain types of equipment for the outdoor theatre, screens, and speakers, for example, are subject to much greater wear, tear, and depreciation, in view of their exposure to the elements.

In spite of the lack of Treasury Department rulings, the owners of drive-ins must continue to pay taxes and, therefore, have to figure depreciation of their equipment, just as indoor theatres calculate depreciation on their carpeting over a period of years. To meet this need for a definite means whereby depreciation on drive-in equipment may be equitably computed, there are presented below two methods which are suggested as temporary expedients until official rulings are promulgated.

First Method

This method results from the thinking and experience of a highly esteemed firm of Certified Public Accountants who have specialized in handling theatre financial questions for 30 or more years. The firm is further eminently qualified to present a proposed method of tax depreciation

DEPRECIATION—BASED ON USE AND REPLACEMENT

	Depreciation %	*Based on Use Life of—*
Adding Machines	10%	10 yrs.
Architects' or Engineers' Fees	10%	10 yrs.
Attraction Boards and Signs	10%	10 yrs.
Automobiles or Jeeps	25%	4 yrs.
Blacktopping on Ramps and Drives	20%	5 yrs.
Cabinets, Confection Stand	10%	10 yrs.
Chairs	10%	10 yrs.
Chairs and Seats, Outdoor	20%	5 yrs.
Construction of Buildings	10%	10 yrs.
Decorative and Foundation Planting	20%	5 yrs.
Desks	10%	10 yrs.
Direction Signs, Outdoor	20%	5 yrs.
Dispensers, Confection Stand	10%	10 yrs.
Electric Signs, Display	10%	10 yrs.
Filing Cabinet	10%	10 yrs.
Filling and Grading	10%	10 yrs.
Film Cabinets	10%	10 yrs.
Fire Extinguishers	10%	10 yrs.
Generators	10%	10 yrs.
Grilles, Confection Stand	10%	10 yrs.
In-Car Speakers and Junction Boxes	20%	5 yrs.
Jacks and Repair Tools	25%	4 yrs.
Lamps	10%	10 yrs.
Lawn Plowers, Motor Driven	25%	4 yrs.
Lighting and Light Poles, Outdoor	20%	5 yrs.
Microphones	10%	10 yrs.
Playground Equipment	20%	5 yrs.
Projection Bases	10%	10 yrs.
Projection Lamps	10%	10 yrs.
Projectors	10%	10 yrs.
Ramps Grading	10%	10 yrs.
Record Players	10%	10 yrs.
Rectifiers	10%	10 yrs.
Refrigerators, Confection Stand	10%	10 yrs.
Rewind Tables and Machines	10%	10 yrs.
Road Bed Construction	10%	10 yrs.
Roller or Drags, Motor Driven	25%	4 yrs.
Safes	10%	10 yrs.
Screen Tower	20%	5 yrs.
Sound System	10%	10 yrs.
Speaker Posts	20%	5 yrs.
Ticket Choppers	10%	10 yrs.
Ticket Registers	10%	10 yrs.
Trucks, Pick-up	25%	4 yrs.
Typewriters	10%	10 yrs.
Underground Cable	20%	5 yrs.

analysis for two reasons: first of all, it leans on the knowledge gained about the depreciation of equipment similar to that used in a drive-in which it has acquired through working in other fields; secondly, since the organization has worked closely with the Bureau of Internal Revenue on a great diversity of tax problems, it is well acquainted with the Bureau's thinking and methods of approach to various questions.

This group of experts suggests the following outline as a guide in determining the main divisions of depreciation charges for drive-in theatres and calculating amortization time and charges thereon:

1. Improvements to the Property

This item will include all charges for filling in the ground, grading, road bed, building of ramps, electric signs, construction of buildings, architects' fees, and all other types of charges which are required to put the grounds in useable condition for a drive-in operation. If improvements are made on leased land, then the cost of improvements are to be amortized over the term of the lease. However, if improvements are made on property which is owned by the operator of the theatre, the rate of amortization should be 10% per year.

2. Outdoor Equipment

This group includes such items as the screen, car speakers, direction lights, chairs and seats, playground apparatus, and other equipment which remains outdoors and is subject to wear and tear by the weather. This type of equipment should be depreciated at the rate of 20% per year.

3. Indoor Equipment

Included in this category are: the projectors, generators, sound system, rewind table, film cabinet, rewinding machine, booth chairs, film splicer, fire extinguishers, record player, microphone, and ticket machine. This type of equipment should be depreciated at the rate of 10% per year.

4. Office Equipment

In this group are included safes, adding machines, typewriters, filing cabinets, desks, chairs, and other similar office accoutrements. This equipment should also be depreciated at the rate of 10% per year.

5. Automotive Equipment

Since drive-ins are usually located at some distance from the centers of cities, a jeep, auto-truck, or other means of transportation is generally needed to obtain supplies, advertising material, and other items necessary to the operation of the theatre.

The outdoor operator usually also has on hand car jacks and other small tools for the repair of tires, so that in the event of blowouts or tire difficulties, he can assist the patron in making temporary repairs. This type of equipment should be depreciated at the rate of 25% per year.

DEPRECIATION—DIMINISHING BALANCE—10 YEAR LIFE

Year	*Book Value Beginning of Period*	*Current Depreciation 37.90%*	*Book Values End of Period*	*Reserve Accumulated*
1	131,118.67	49,693.98	81,424.69	49,693.98
2	81,424.69	30,859.96	50,564.73	80,553.94
3	50,564.73	19,164.03	31,400.70	99,717.97
4	31,400.70	11,900.86	19,499.84	111,618.83
5	19,499.84	7,390.44	12,109.40	119,009.27
6	12,109.40	4,589.46	7,519.94	123,598.73
7	7,519.94	2,850.06	4,669.88	126,448.79
8	4,669.88	1,769.88	2,900.00	128,218.67
9	2,900.00	1,099.10	1,800.90	129,317.77
10	1,800.90	682.23	1,118.67	130,000.00

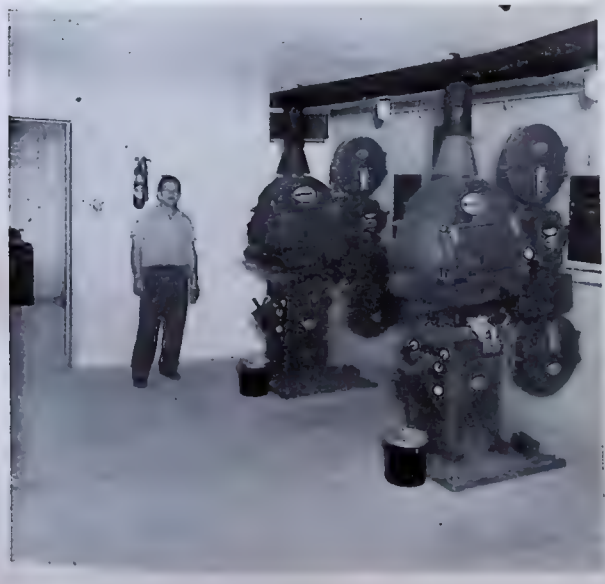
Second Method

This method of calculating depreciation, as shown in the table below, has been devised by a large theatre circuit which is currently operating several drive-in theatres. Its breakdown of the problem is based on a straight average annual depreciation of 37.90% of the remaining book value of the property and enables the major share of the capital investment to be charged off during the first four years of a projected ten years.

Conclusion

It is important, however, that the two methods described above are offered only as helpful suggestions in figuring drive-in depreciation. Although they have thus far been accepted in the cases in which they have been used, they have not, up to the present time, won any particular sanction by the Government. It appears reasonable to assume, however, in view of the respected sources from which they have emerged, that they may be usefully employed as temporary measures until such time as Federal authorities make different rulings on the subject of drive-in depreciation. However, it is quite possible that governmental decrees on the matter, when they do crystallize in definite form, will closely parallel the methods outlined here.

A MAJOR INVESTMENT in any drive-in theatre is the powerful, high quality equipment necessary to the projection of a brilliant picture. Here is the equipment installed in the large, roomy projection booth of the Starlite, near Williamsport, Penna. Motiograph projectors and sound. Motiograph high-intensity lamps. Golde rewinder, etc. The supply dealer was Vincent M. Tate Theatre Equipment, Forty Fort, Wilkes-Barre, Penna.





Insurance Requirements for Drive-Ins

Lack of Experience has Prevented Broad Coverage, But Some Worthwhile Protection is Now Obtainable

BRIEF: *Insurance is one of the best safeguards ever devised against the troubles of the future . . . Millions of dollars are invested each year in life insurance . . . for example . . . so that his next of kin will be provided for . . . in the event the holder of a policy dies . . . No one can anticipate the misfortunes which lie ahead . . . and it is always well to be prepared for them.*

A drive-in theatre . . . like any other business . . . may have its "rainy day" in the form of fire, theft, injuries to patrons, etc. . . . Disaster can strike the drive-in . . . as readily as any other place of amusement . . . and the losses thereby incurred may put the theatre out of business.

Insurance companies . . . as well as drive-in owners . . . know the outdoor theatre needs protection . . . but they must gain more experience with such operations before extensive coverage can be obtained . . . Time alone will enable the drive-in to get all the insurance it needs.

The following article points up the differences between indoor and outdoor theatres . . . from the insurance viewpoint . . . and discusses the important types of coverage which are available to the drive-in owner now . . . In the best interests of his property . . . and himself . . . he will do well to consider them seriously.

Since the earliest days of commerce, businessmen have been anxious to provide protection for their investments against the elements and other hazards of every day life. This natural fear of the unknown, coupled with a sound desire on the part of businessmen to be able to meet successfully any unforeseen problems which the future might bring, has been responsible for the steady growth of the insurance business. As a result, it is today possible to insure almost anything from a skyscraper to an opera singer's voice.

The insurance business has, however, like many others, matured only through long experience in a host of fields. Just as courts have had to establish precedents to be followed in cases of crime, so insurance companies have had to experiment with policies and rates in different fields before forming a standard pattern. When the automobile was still in its infant stages, little was known about the hazards to life and property it would conceivably present over a period of time, and it was only through observation and study of hundreds of thousands of automobile accidents that insurance firms were able to evolve the reasonably well standardized rules and rates governing the issuance of automobile policies today.

The Indoor Theatre vs. the Drive-In

The average drive-in theatre represents the investment of a considerable sum of money in grounds, buildings, and equipment. Due to its outdoor situation, the drive-in is subjected to an even greater degree, in many cases, than the enclosed theatre to the dangers of weather, burglary, fire, etc. The drive-in's need for insurance is, therefore, fully as great, if not greater, than that of the indoor house.

Since it has had ample time to entrench itself firmly in the fore of the entertainment scene, the roofed motion picture house has become a familiar object in insurance circles. An exhaustive store of knowledge has been accumulated on the nature of its construction, the fire hazards inherent in the handling of film, the situation of the boxoffice and manager's office in relation to the problems of theft and hold-up, the dangers presented by different types of heating and air-conditioning systems, the inflammability of interior furnishings, the fire hazards of surrounding stores, etc. In view of the long period of trial and error to which the indoor theatre has been subjected in the insurance mill, it has been possible to derive and establish relatively standardized types of coverage and rates.

Such, however, is not the case with the drive-in. The mystery which shrouds the outdoor theatre in the insurance world is principally due to one factor alone. Due to the fact that the first drive-in was built a scant 17 years ago and only since the end of World War II has the drive-in really come into its own, little is known about the drive-in as an insurance risk. Due to its novelty, the drive-in still continues to be vagary in the minds of many of those in even the highest echelons of the insurance field. The outdoor theatre is broadly known as a place where patrons sit in their cars and watch a movie on an over-sized screen, but there is a painful lack of genuine understanding about the various phases of drive-in operation and the attendant problems.

The result of this shortage of knowledge about and lack of experience with insuring drive-ins has caused a certain reluctance on the part of many companies to insure outdoor theatres. This hesitancy on the part of some insurance firms to cover his investment has been a source of concern to every drive-in owner who wants to protect his property. Until such time as drive-ins have "aged" to the point where they are viewed in a clearer light as an insurance risk, it is unlikely that there will be any

ACCIDENT HAZARDS dwell particularly around the movement of vehicles and the movement of walking patrons around an unlighted or only partially lighted area. Intermission time is the most dangerous.



specifically designed policies or standardized rates adopted to cover them.

In the meantime, however, the drive-in owner must have insurance of some sort to safeguard his investment, and a few insurance firms have issued supplementary policies to cover outdoor theatres. Most of these policies have been written at the customary rate used for indoor theatres (figured on a percentage of admissions), but, in all likelihood, drive-in insurance rates in the future will be adjusted up or down as experience decrees.

While the drive-in industry awaits the evolvement of more definite and broader action on its insurance problems, it seems well worthwhile to examine the types of coverage which the owner should have that are available to him now.

Workmen's Compensation

This type of insurance, designed to reimburse employees for wages lost through accidents or illness, should be carried by the owner in the amounts specified by his particular state. These sums vary from state to state, and the owner would do well to acquaint himself thoroughly with the statutory regulations affecting this type of insurance.

Comprehensive General Liability

The first section of such a policy, protecting a drive-in owner against injuries to a person or persons in the theatre area, should be written in proper limits with not less than $100,000 to one person, with an upper limit based on individual requirements. If, for example, a patron should trip over a carelessly discarded soft drink case on his way to a restroom and negligence could be proven on the part of the theatre, the owner would be liable for medical expenses and damages. It is important, therefore, that he be adequately protected against such contingencies.

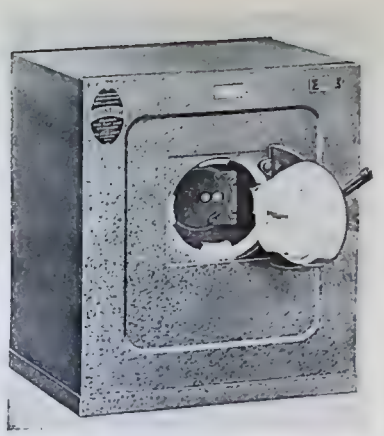
The second half of a drive-in liability policy should cover property damage, with a provision that the insuring company will recognize valid claims in connection with damage done to a patron's car by colliding with an object while he is being directed to a designated spot in the theatre area by an attendant. This provision would not apply in any case where an employee of the theatre had been driving the patron's car.

Thirdly, since drive-in theatres are usually located in outlying districts, it is often customary for employees to use their own automobiles to travel to and from the theatre site; the theatre owner should be properly insured against this exposure.

Lastly, automobiles such as "jeeps," belonging to the theatre owner which are used in connection with the operation should be insured for public liability and property damage in proper amounts.

Burglary

The drive-in theatre, because of its ready access outdoors, presents a unique problem as far as burglary insurance goes. As a result, no casualty company has yet developed any extensive experience for this type of coverage, and regular rates for existing theatres are being used.



SIDE-OPENING burglarproof safes such as the above effect large savings in insurance rates.



CLOSED, this side-opening burglarproof safe is a sturdy and goodlooking piece of furniture.

Many drive-in burglary policies at present, however, contain a provision requiring evidence of forcible entry, a circumstance often difficult to prove within a lot, or even a fenced-in area. Fortunately, this difficulty may usually be overcome by adding a theft endorsement to the policy. Rates can be reduced for this type of coverage if the owner can guarantee that a watchman will be on duty at all times when the premises are not open for business.

Hold-Up Insurance

Insurance against hold-ups may usually be obtained in a limited form under an Inside and Outside Hold-up policy or a broad form Money and Securities policy. Whatever form is selected, the insurance company will probably insist that the money either be put in a depository every night or that the theatre be provided with a burglar-proof safe in which the receipts will be kept. The broad form of policy is, naturally, the more desirable, and rate reductions are generally granted if a burglar-proof safe is employed. Additional rate reductions for the stationing of a watchman on the premises are allowed for hold-up as well as for burglar insurance policies.

Dishonesty of Employees

This type of insurance, designed to protect the owner against pilfering by any and all members of his staff, should be written in an amount sufficient to cover any eventuality. This coverage may be accomplished by either a Primary Commercial bond or a Blanket Position bond.

Fire and Miscellaneous

Since a drive-in theatre is usually situated at a considerable distance from fire-fighting facilities, it is particularly important that it be adequately protected against damage caused by fire.

It is often possible to secure endorsements to fire insurance policies which will also protect the theatre against damage caused by windstorm, hail, riot, riot attending a strike, civil commotion, aircraft, vehicles, smoke, and vandalism. Again, due to lack of experience in the insuring of drive-ins, these policies may be somewhat limited in nature, but they do provide the best sound protection available at the present time.

SPACE-SAVER in the restricted areas of the box-office is this equally sturdy top-opening safe.



TOP-OPENERS possess the same burglarproof features as the more orthodox side-opening ones.



Drive-In Admission Tax Rulings

Bureau of Internal Revenue Requirements and Decisions on the Collection of Admissions are Clearly Defined

By GAEL SULLIVAN
Executive Director, Theatre Owners of America, Inc.

BRIEF: ***It has often been remarked that there are only two things sure in life . . . death and taxes . . . While it seems reasonably certain that the drive-in theatre . . . due to its strongly entrenched position in the entertainment field . . . will never have to confront the former eventuality, taxes are a definite part of every outdoor operation . . . Uncle Sam lurks constantly in the shadow of the boxoffice to collect his just deserts . . . Unfortunately, much confusion has existed in regard to exactly what is due the old gentleman . . . and how it should be collected.***

Although there has been some "corner cutting" on the part of less scrupulous operators, most of the difficulties in regard to admission taxes have arisen because of honest misunderstanding . . . or confusion over technicalities . . . of federal tax regulations as they affect drive-ins . . . Many showmen have been perplexed over the ways in which taxes apply to such common situations as . . . the parking of cars, multiple admissions, changes of admission policy, a differential between admission scales for walk-in and drive-in patrons, wholesale admissions, "package deals", etc.

The author of this study . . . who has fronted for the industry in obtaining drive-in tax rulings from the Commissioner of Internal Revenue . . . sets forth the answers given by the Government to typical questions raised . . . in a worthy effort to dissolve confusion over tax problems in the minds of operators throughout the country.

Three important tax rulings on drive-in theatres were made by the Bureau of Internal Revenue at the request of the Theatre Owners of America. We made these inquiries not only on behalf of our conventional theatres which have acquired drive-in establishments, but also on behalf of independent drive-in operators who have joined our organization and had not been previously identified with theatre operation.

So great has been the growth of drive-in theatres during 1949, particularly in the South, and so diverse the pattern of admission charges adopted by these outdoor attractions, that we felt, in the interest of all concerned, there should be a clarification of some of the tax rulings on theatre admissions. We took our problems to the Bureau of Internal Revenue and received very frank and complete replies to all the questions we raised.

Car Parking

Our first inquiry arose from the confusion created by the original ruling of the Bureau on the applicability of the admissions tax to be charged by drive-in theatres for the parking of cars. When the question was first presented to the Bureau, apparently by some individual exhibitor, a ruling was issued to the effect that the tax did not apply to the charge made for parking a car at a drive-in theatre if, in addition to such a charge, the theatre had a bona fide charge for a single admission which must be paid by anyone admitted to the theatre.

When TOA asked for a clarification of this ruling, we were informed that reconsideration had been given to the matter by the Bureau and the ruling changed. The new ruling, as set forth in the reply to our inquiry, read as follows:

"Drive-In theatres are designed to serve patrons who will arrive in a car and witness a movie while remaining in a car. The term 'parking charge' ordinarily implies a charge made for 'parking' a car while the passengers are elsewhere than where a car is parked. Such a charge does not ordinarily denote a charge made for 'parking' a car while the occupants are witnessing an outdoor movie or some other attraction.

"In view thereof, it is held that where a drive-in theatre has a charge for a single admission, payable by anyone whether he enters on foot or enters in a car, and in addition thereto has a charge for the 'parking' of the car in the theatre, the so-called 'parking charge' is, in fact, a charge for an accommodation (i.e. the privilege of viewing the movie while remaining in the car) within the meaning of Section 1704 of the Code, and is subject to the admissions tax imposed by section 1700 (a) of the Code, as amended."

One-Ticket Multiple Admissions

In our next inquiry to the Bureau we posed this question:

"May the drive-in theatre base its admission price on a per car basis or must the admission tax be computed on a basis of the number of persons in the car? Or, stated in another form, we asked: "May the drive-in theatre admit a group of individuals on one ticket, paying an admission tax based on the price of that one ticket, without incurring liability for admission taxes on the total number of members in that group."

This inquiry was answered by R. J. Bopp, Acting Deputy Commissioner, who wrote us as follows:

"If on a particular occasion, a drive-in theatre does not have an established price for a general admission, but does have a set charge for the admission of a group of persons occupying one car, regardless of the number of persons in that group, the set price made for the admission of the group is the established price of admission to the theatre on that occasion. Under such circumstances, the admission of a group of persons in a car constitutes one admission regardless of the number of persons in the group, and the tax is based on the established price of admission for the group.

"Where a drive-in theatre does not have an established price for a single admission on a certain night of each week and it charges $1.00, including tax, for each car admitted regardless of the number of occupants, the established price of admission to the theatre is 83 cents, and the total Federal admission tax due thereon is 17 cents. The group of persons in each car may be admitted on one ticket."

Mr. Bopp's ruling apparently failed to clear up the confusion in the minds of some exhibitors, one of whom wrote me as follows:

"I interpreted Mr. Bopp's reply to you in that if a drive-in is open seven days under a regular standing policy of forty cents per person, the owner could not resort back to the $1.00 per car admission price regardless of the number of occupants in the car. Am I correct in my interpretation?"

Admission Policy Changes

The inquiry was referred back to the Bureau, which replied as follows:

"The theatre exhibitor who addressed the above inquiry to you is not correct in his interpretation of the ruling dated July 26, 1949. If a drive-in theatre does not have in effect on a certain night or nights an established price for a single admission and it charges $1.00, including tax, for each car admitted on such occasion, regardless of the number of persons in the car, the established price of admission to the theatre is 83 cents and the total Federal admission tax due thereon is 17 cents. The theatre may change its policy at any time and admit patrons only on the basis of a per person charge. It may not, however, admit cars with one person for one price such as 40 cents, including tax, and for the same performance admit a group of persons in a car for $1.00, including tax.

Different Patron Charges

"A drive-in theatre may, however, have one established price for the admission of persons who enter the theatre on foot and, in addition thereto, make a set charge such as $1.00, including tax, for the admission of automobiles without regard to the number of persons therein. This policy may be followed for the reason that the persons in automobiles are not admitted under the same circumstances under which persons on foot are admitted, and the charges for the two classes of patrons are not for the same or similar accommodations."

Splitting Weekly Charges

Another question raised by an exhibitor was this:

"If a drive-in has not been opened yet and no price established, could we operate five days a week at 40 cents per person and two days a week at $1.00 per car. Or even seven days per week at $1.00 per car?"

The Bureau's answer was: "Yes. This policy may be followed by any drive-in theatre whether it has or has not yet been opened."

The same exhibitor asked:

". . . What part of the time would the policy be an established policy? Could an operator say, after two weeks of operation, that his forty cent admission price per person was not to be an established policy and later decide that his established policy would be $1.00 per car including tax?"

To this inquiry, the Bureau said:

"The policy of the theatre proprietor in this regard may be changed at any time. Also, the proprietor may, if he so desires, follow one policy for one part of the week and the other policy for the remainder of the week."

These rulings apparently went a long way toward clearing up the confusion created in the minds of some exhibitors, as they laid down a well-defined policy, and we have had no further inquiries concerning this phase of drive-in operation.

Wholesale Admissions on One Ticket

However, this ruling presented a serious problem to some drive-in operators who charged a flat "per car" admission price: namely, how to handle the situation if 10 or 12 persons piled into a car and demanded the right to enter at the flat price of $1.00, or whatever the fixed charge was per car, or even drove up in a truck or a bus with 20 or more persons and wanted to get in for a single "per car admission." Obviously, this possibility also was of some concern to established indoor theatres who might be in competition with a drive-in, and could not provide any such wholesale admissions on one ticket.

The drive-in operator, who admitted such large groups for a single per car admission, might be inclined to do so on the theory that the potential loss in admission prices may be made up through the sale of confections to the group, but the competing indoor theatre may lose a substantial amount of patronage if the practice of admitting large groups for one admission is widely followed.

"Package Deals"

There was one other question, raised by a New Mexico exhibitor, which we referred to the Bureau. This exhibitor wrote:

"From time to time, theatres in our state hold what might be termed 'package deals' . . . a show made up of small cartoons and short subjects or a subject from the Children's Library of Films which is advertised, for instance, 'Admission 20 cents, including sack of popcorn.' However, the sign in the boxoffice window would read: 'Admission .098, states sales tax .002 . . . popcorn 10 cents. Total 20 cents.' Or it will read 'Admission .098, state sales tax .002, ticket 10 cents . . . popcorn 10 cents, total 20 cents.' Will you have the department tell you which is right, or if either may be used legally, or if it is permissible to use both styles, depending on the whim of the manager?"

To this inquiry, the Bureau replied as follows:

"The tax under section 1700 (a) of the Internal Revenue Code, as amended, applies to that amount which one must pay for admission to any place, including admission by season ticket or subscription, except that no tax attaches to an admission charge of less than 10 cents for a child under 12 years of age.

"Since the minimum amount that one must pay in order to gain admission under the above statement of facts is 20 cents, that amount, less the State sales tax, is the amount upon which the admissions tax must be computed.

"Regardless of which of the two plans is used, a Federal admissions tax of 4 cents should be collected, unless the total charge of 20 cents includes the tax, in which case a tax of 3 cents should be collected.

"If all children under 12 years of age who desire admission to the theatre are admitted for only .098 cents, tax, .002 cents, total 10 cents and there is no requirement that popcorn be puchased, the amount voluntarily paid for popcorn is not a part of the admission charge, and the tax does not apply since the total admission charge, under such circumstances, is less than 10 cents. On the other hand, if a charge of 20 cents is made to each child, in return for which the child receives popcorn and admission to the theatre, the entire amount, other than the State sales tax, is an admission charge upon which the tax must be based."



FROM THE WEST COAST come two interesting drive-in theatres from the drawing boards of Wm. Glenn Balch, Architect, and Louis L. Bryan. The Baseline, Highland, Calif., accommodates 900 cars and was built for Harry Dickerman at a cost without equipment of $158,000.00. The El Monte, El Monte, Calif., houses 850 cars and was built for Pacific Drive-In Theatres Circuit at about the same cost. Both theatres illustrate the permanence and fine structural effects possessed by the newer theatres that are being built.



Intercom Systems in Confection Sales

Two-Way Communication Between Purchasers and the Concession Stand Speeds Up Without Ramp Vending

BRIEF: *One of the businessman's most revered pieces of office equipment is a small box-like affair which sits on his desk . . . By a mere flick of a switch on his intercom system he can contact instantly any department . . . or individual . . . thus saving him innumerable footsteps and countless hours of precious time.*

Since the drive-in theatre is rapidly acquiring the full-grown stature of "big business," there is a pressing need for speeding up its operational efficiency . . . particularly as far as the important concession stand is concerned . . . At the moment, the distance . . . which separates most drive-in confection buyers from the source of supply . . . does not make for the most efficient merchandising . . .

In an attempt to conquer these difficulties, two firms have designed intercom systems for drive-ins which . . . by making vocal communication between the patron and the concession stand possible through individual in-car speakers . . . will enable prompt and direct delivery of orders . . . In addition, these intercom systems will provide a drive-in manager with a ready method of keeping his finger on every phase of his operation.

INTRODUCTION

Every drive-in operator knows and appreciates the importance of confection stand sales as an invaluable adjunct to the receipts at the boxoffice. Without a good volume of business in the confection department as well as at the gate, the profit picture will not be nearly as bright at the close of the season.

The most effective merchandising of candy, popcorn, soft drinks, etc., at a drive-in presents, however, certain problems which do not confront a similar operation in a roofed theatre. In the first place, an indoor house has its audience confined within a relatively small area, whereas the patrons of a drive-in are scattered over several acres of ground. Secondly, people attending an enclosed house will come to a lobby candy stand themselves on foot and require no solicitation or service in their seats, while drive-in patrons generally do not like to leave their cars to purchase confections (except at intermission time), are often required to walk a considerable distance to the confection stand, and frequently prefer to be served in their cars, if this can be accomplished without undue annoyance.

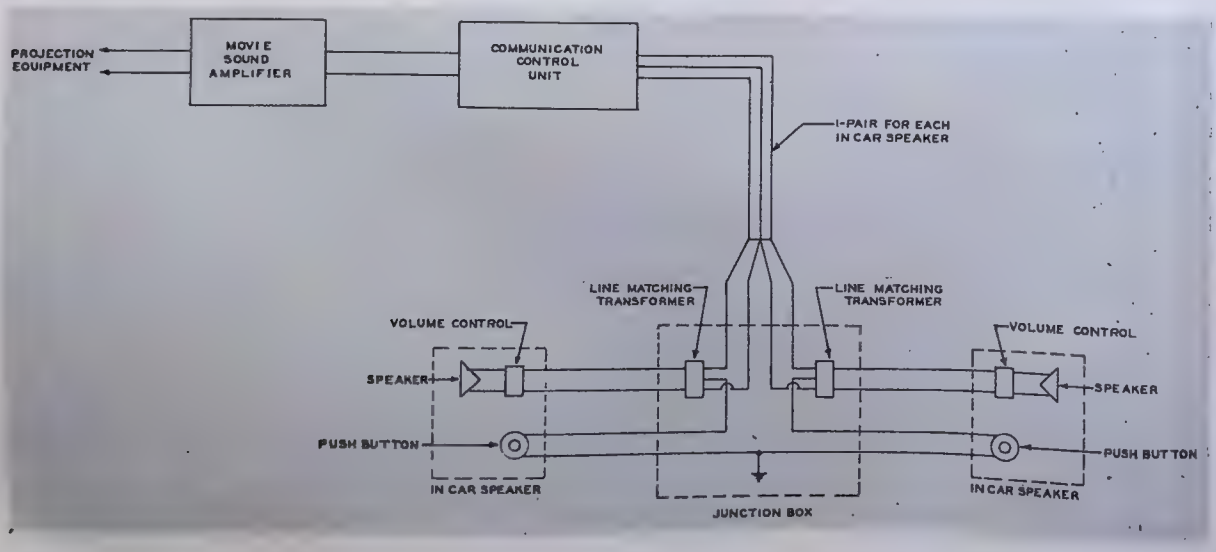
In an effort to combat the inevitable crowding at confection stands which occurs at intermission time and to step up business while shows are in progress, many drive-in operators have used the well-known "ramp boy" system or have actually had confection stand attendants circulate with their wares among the parked cars. These selling methods have, however, caused much irritation to patrons trying to hear the show above the noise of conversation between purchasers and venders or the cries of the venders themselves. In many instances, confection salesmen approach cars and interrupt patrons listening to the show to inquire as to whether or not they want anything, much to the displeasure of those thus disturbed.

The ideal solution to the problem lies, of course, in devising a means whereby a patron desiring refreshments may indicate his wishes without solicitation from attendants and without disturbing other members of the audience by loudly calling a confection salesman himself. The attachment of signal lights to speaker posts has been a step in this direction, but such a device has, unfortunately, proven to be inadequate in the larger drive-ins or wherever small staffs make long waits necessary.

In the final analysis, the most workable panacea is found in some sort of intercommunicating system, whereby patrons may establish direct contact with the confection stand itself without leaving their cars and place orders which may be brought to them by stand attendants. Aside from its obvious conveniences to patrons, such a system would relieve the management of many headaches and considerable expense. A much smaller stand could handle an even larger volume of business because there would be smaller crowds at intermission time with fewer attendants needed inside the stand; there would no longer be any need for ramp soliciting and a relatively small, efficient force of confection stand personnel could handle competently the delivery of orders to cars.

Aware of this need for more efficient confection stand operation and patron service, two companies have recently developed intercommunicating systems which appear to offer a practical solution to the difficulties outlined above. Although each of the two systems has

THE NEILL SYSTEM wiring diagram as applied to drive-ins, based on their railroad experiences.





CONSOLE OF THE NEILL SYSTEM permits a direct contact with each individual speaker in response to a particular individual light signal. Such direct intercommuncation requires a large wiring system.

distinct characteristics of its own, the basic principle of operation is the same in that they both enable direct vocal contact between the patron and the confection stand. To a great extent their drive-in value will depend on the cost of necessary equipment and of its installation.

THE NEILL SYSTEM

Although this intercommunicating system, developed by the R. W. Neill Company, has not actually been employed in a drive-in, definite plans have been laid by which it may be practically adapted from its original use in railroad freight yards to the needs of the outdoor theatre. In order to understand fully the detailed workings of the system, it is worthwhile to review briefly the successful role it has played in railroad operation.

Railroad Background

A typical Neill railroad intercom system includes a number of talk-back and paging speakers controlled from consoles in communication towers. A yardmaster who knows the exact location of an employee manipulates a key on the control panel in front of him and contacts the man over one of the talkback speakers situated in strategic places throughout the yard. The party sought replies by talking back into the speaker on which he was called.

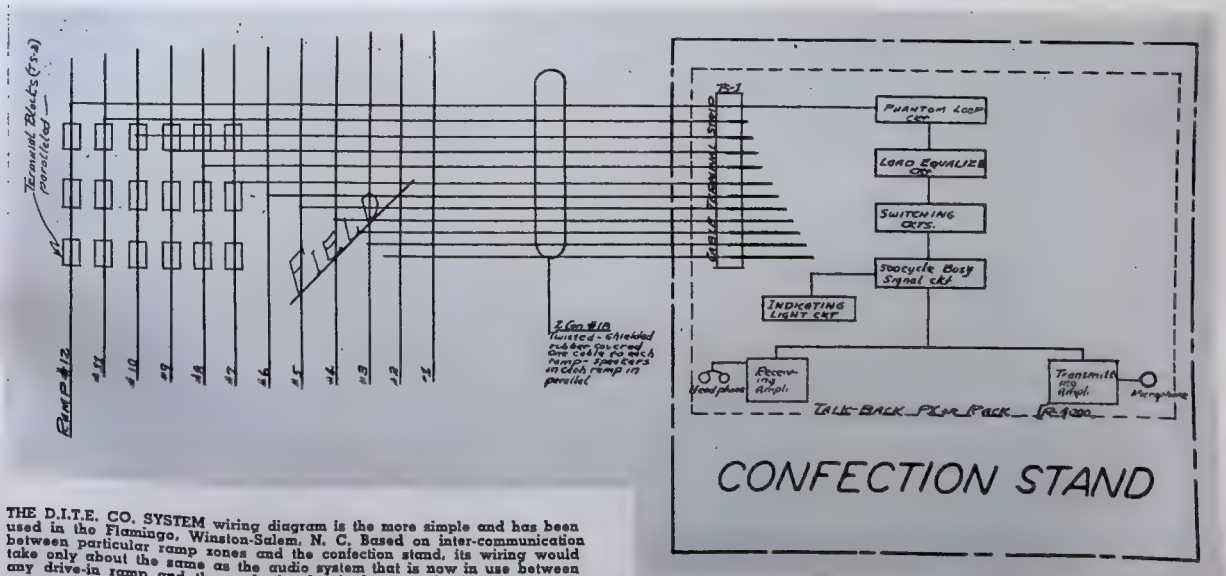
If, however, the yardmaster does not know the exact location of a particular man, he calls him over one of the paging speakers, and the man thus summoned goes to the nearest talk-back location to take and answer the call. His acknowledgment of the call is indicated by a lamp which lights on the yardmaster's console. The control panel also includes a marker for waiting or incomplete calls.

Individual underground wires and cables have been run to most of the talkback and paging speaker locations, except in a few instances where the use of aerial cable has been necessary. The underground cables from the communications towers, and from the individual speakers in each group, terminate in a concrete junction box near the group, while those entering the towers terminate on telephone-type terminal strips in a box near the base of the towers.

Drive-In Adaptation

The basic system described above can, with minor changes to provide for connection of the theatre sound circuits, be adapted to drive-in use to facilitate confection stand operation. A control console installed in the stand (for a 500-car theatre a control cabinet would be approximately 20 inches high, 36 inches long, and 14 inches deep with or without the steel desk) would contain coupling devices to connect existing or standard type sound amplifiers to individual in-car speaker lines and maintain perfect impedance matching. Wiring from sound amplifiers to the communicating control unit would consist of the same number of conductors as used on existing systems. A separate amplifier for the two-way communication contained in the control unit would not in any way affect the theatre sound amplifiers. Wiring from the control unit to the in-car speakers would consist of one individual twist pair of conductors to each speaker. Current source for the communicating unit would be standard 110-130 volt, 60-cycle A. C., with a 500-watt maximum power consumption.

The control panel for the confection stand operator would contain an indicating lamp for each car location and would also provide for individual two-way communication to each patron without interference to others. A patron desiring to signal the operator would momentarily press a button on the in-car speaker without interruption to the film sound. This simple procedure would actuate the indicating lamp on the operator's control panel corresponding to, and identifying, the patron's exact car location. While the patron continued listening to the show, the indicating lamp would remain "On" until the operator answered.



THE D.I.T.E. CO. SYSTEM wiring diagram is the more simple and has been used in the Flamingo, Winston-Salem, N. C. Based on inter-communication between particular ramp zones and the confection stand, its wiring would take only about the same as the audio system that is now in use between any drive-in ramp and the projection booth; but would add to efficiency.



IN OPERATION, the girl at the console of the D.I.T.E. Co. system can record 300 orders per hour and passes them along to the confection department.



Smaller stands can result, and the one illustrated has been found adequate to serve the orders of the 600 car Flamingo. Manager's intercom is extra.

To receive the order, the operator would depress a key associated with the indicating lamp and request the order. The patron would then talk directly into the in-car speaker giving his request. During the short period of eight to ten seconds required to take the order, the film sound would be interrupted to this one speaker. The sound would, however, be immediately restored to the circuit when the operator returned the individual key to its original position. The operator would, of course, follow the same procedure in answering other calls in sequence. Each order would be turned over to an attendant for filling and delivery to the patron at the proper location. One operator can handle as many as five calls a minute, and a second control unit may be installed for another operator if necessary.

In the event of an accident to a speaker unit, post, or wiring, the film sound and two-way intercommunication would be affected to the one location only. Any tampering with the speakers and their connecting cables would cause the indicating lamp on the operator's control panel to light up and thus result in quick discovery of such mischief.

ACTUAL WIRING OF THE D.I.T.E. CO. system resembles a switchboard with its own amplifiers.



THE D. I. T. E. CO. SYSTEM

The Drive-In Theatre Equipment Company has developed a talk-back in-car speaker system especially for drive-ins, and has made a highly successful installation at the Flamingo Drive-In, Winston-Salem, N. C. According to reports, confection sales have averaged fifty per cent of boxoffice receipts during the season by use of the system.

Basic Principle

The D. I. T. E. Co. system for communication between patrons and the confection stand operates in a manner generally similar to that of the Neill system, but the former does not run individual cables to each speaker as does the latter. Instead, the D. I. T. E. Co. Auto-Voice System has been developed to accomplish the same purpose with a single two-conductor cable paralleling groups of 50 or more speakers on the same circuit. For example, a 500-car drive-in can be equipped with the Auto-Voice System with approximately 10,000 feet of cable, a quantity not more than that ordinarily used for the audio lines. In other words, the amount of cable for the talk-back will be equivalent to the reproduction cable.

At the Flamingo Drive-In, for example, each ramp is lettered down the field and each speaker is numbered. To take a case in point, D-46 would indicate that the speaker is located in the fourth ramp and is the 46th speaker from the left of the field. A switch is located on the side of the speaker cabinet for talk-back use. Ten circuits of two-conductor shielded cable are used with one cable running to each ramp. All the speakers are paralleled to their respective ramp cables. These talk-back cables terminate, of course, at the PBX rack or console located in the confection stand.

Operation

In order to operate the Auto-Voice System, the patron depresses a talk-back switch which automatically lights an indicating light on the PBX board on that particular ramp. The confection stand operator, equipped with head phones, flicks a key and takes the order which is immediately filled and delivered to the customer, who has given the number of his speaker location on the ramp. In the latest circuit design, a busy signal circuit has been added to the console as an operational aid. In the event that the operator is receiving an order, he or she can flash the busy tone to other circuit callers to notify them to call again within the next few minutes.

An Added Feature

Aside from the obvious improvements it lends to the efficiency of a confection stand operation, the Auto-Voice System permits the manager to exercise greater control over his operation by making it possible for him to communicate with any of his departments. Furthermore, by using a talk-back speaker not in use, an usher or other employee in the field can communicate with the manager or any other department through the central PBX.

CONCLUSION

Both of the two intercom systems described above appear to afford a logical and practical approach to the solution of the difficulties which confront the majority of drive-in confection stand operations. Although each system achieves the same goal by a similar general method, each has its own distinctive features which are well worth the consideration of every drive-in operator interested in improving confection sales.

Beyond their basic function of effectively pinpointing patrons desiring to make refreshment purchases, such intercom systems can reasonably be construed to have a host of other potential uses. For example, it is quite conceivable that an exchange of information as to the availability of parking spaces between personnel in the ramps and those at the gate over such systems would enable swift and efficient direction of cars to parking locations. In short, the possibilities which intercom systems offer as a means of linking the various elements of a drive-in together in a more coordinated chain seem almost limitless. An efficient communications system can serve a drive-in operator and serve him well in endless ways.

Daylight Showings for Drive-Ins

A Movable Screen is Recessed in a Housing That May Also Consolidate Other Theatre Components

BRIEF: *An outdoor theatre . . . as any other form of business enterprise must do . . . has to return a fair profit to its investors before it can be termed a true success . . . The vast majority of drive-ins have not failed in this obligation . . . as evidenced by the fact that their numbers are still multiplying . . . but the handsome profits which they have yielded would be greater still . . . if they could begin showings before the descent of darkness . . . On this score, at least, the conventional theatre has enjoyed a distinct edge over the drive-in . . . due to its ability to show pictures at any time.*

In order to overcome this handicap, a Pittsburgh organization and a Mid-West drive-in circuit owner have come up with two rather unusual plans . . . which would appear to suggest a workable solution to the problem of presenting shows outdoors during daylight hours . . . This survey deals only with the former . . . A unique translucent screen . . . encased in a shadow box . . . may be synchronized to changing light conditions . . . for it can be moved forward on tracks as circumstances warrant . . . Projection is accomplished by the rear-screen method . . . with the projector situated near the screen rather than in a separate ramp booth . . . Provisions have also been made to house other facilities in the same structure containing the exhibition equipment.

The following article discusses the operative aspects of the proposed plan . . . and sets one to thinking about the countless possibilities it offers for designing the drive-in of the future along more coordinated . . . and practical . . . lines.

Introduction

The glamour of the outdoors as a setting for the showing of motion pictures has been one of the prime drawing cards of the drive-in theatre. Natural surroundings and the accompanying air of informality have readily attracted people of all ages, who have found in the drive-in the satisfaction of two cardinal desires —an outing in the family car and the viewing of a movie.

There is, however, nothing perfect in the world, and the drive-in's situation under the skies is no exception. While the location of the drive-in outdoors is a powerful magnetic attraction, it also presents one salient problem with which the normal roofed theatre does not have to cope. Specifically, the drive-in operator has to wait for the arrival of dusk at least before he can begin his first showing, whereas the conventional theatreman can run a performance at any time of day or night.

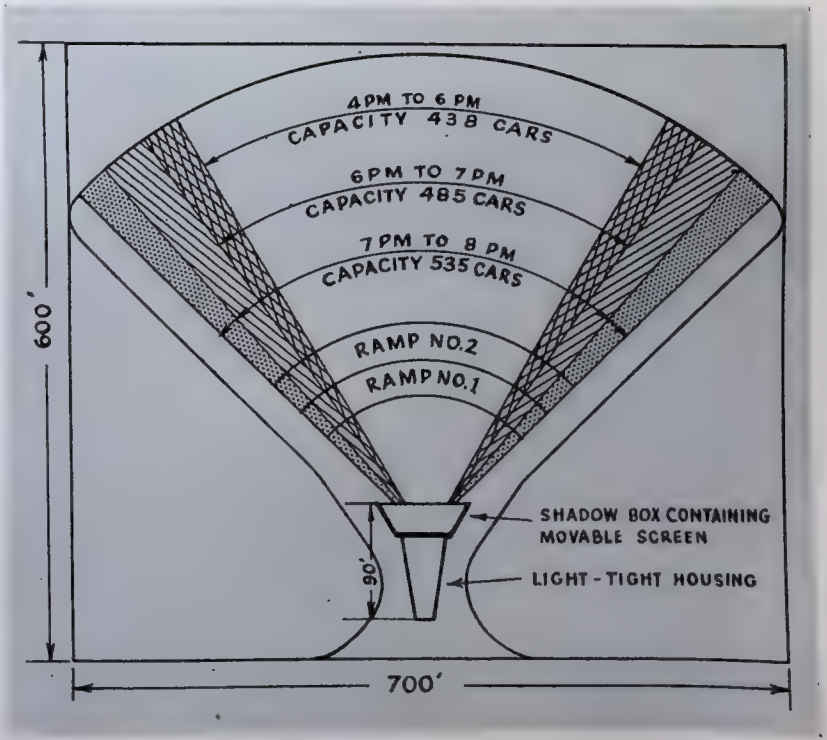
This characteristic of the drive-in has been particularly disconcerting during the time of the year when the days grow steadily longer and in sections of the country which use Daylight Saving Time. Oftentimes, during these periods, the drive-in has been unable to start its first show until well after eight o'clock in the evening and is barely able to get in two complete shows before the arrival of the time when patrons are anxious to go home to bed. This late daylight factor has also, of course, prevented drive-ins from presenting the matinees which aid in boosting the indoor theatre's box-office receipts.

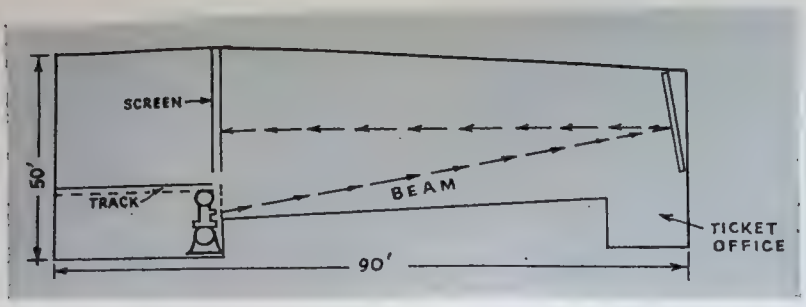
Up until a short time ago, efforts made to project motion pictures outdoors during daylight hours met with little success because of several difficulties. First of all, a screen directly exposed to daylight does not produce a distinct image because the light eliminates the shadows needed to define an image projected on the screen. Although some success may be achieved by shielding the screen from outside light, the angle from which an image on the screen may be viewed is thereby substantially reduced and the capacity of the theatre along with it.

A second difficulty encountered is the loss of projected light by diffussion on the screen. If screen losses are reduced, the proportion of external light may be increased without destroying the definition of the image on the screen, but until recently no practical solution to this problem had been found. Other difficulties which have been encountered in present-day drive-ins, in regard to daylight showings, include: the extreme flatness of images, caused by the large size of the screen; relatively poor light, caused by a long throw and the enormity of the screen, and the loss of tone and effect in colored images.

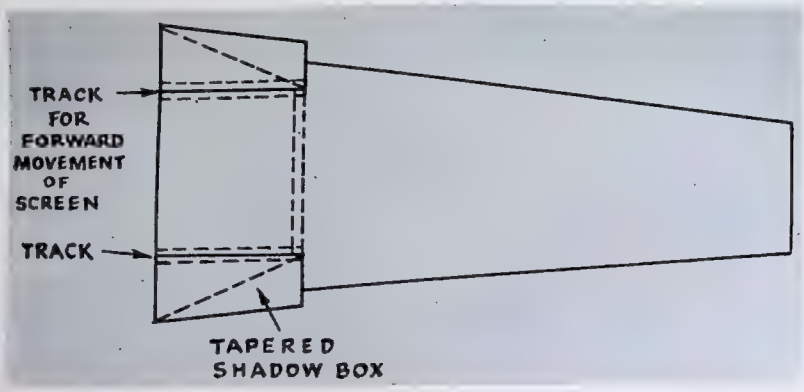
During the past few years, however, considerable attention has been devoted within the industry toward finding ways and means to surmount these obstacles to drive-in daylight showings. Although it is fairly common knowledge that a company in the Mid-West is also working on a solution to the problem, the Star Distributing Agency, through General Manager Vincent J. Corso, has made available for publication a brief description of a plan it has devised for daylight showings. In spite of the fact that the project is still in the experimental stage, it is expected that the finished product will be placed before the public in the spring of 1950.

THE SHADOW BOX SCREEN, coupled with the added clarity of a short throw through rear projection, is believed to make possible a matinee show as early as four o'clock in the afternoon. The recessed screen will produce narrower viewing angles, gradually widening as light fades and the screen moves forward.





ABOVE: A SIDE VIEW of the planned central building illustrates the possibilities of incorporating under one roof the entire drive-in theatre activities except for the ramps and speakers. It is believed that, in the well constructed first floor and screen end, could be located the projection room, confection sales, boxoffices, rest rooms and manager's office; while the relatively lighter second floor masking would support the name signs and attraction boards. BELOW: a bird's eye view illustrates the horn-shape.



The Corso Method

Although the Corso plan uses a standard projector and film, there are distinct variations in the physical construction of the apparatus and the type of screen used. Basically, the projection apparatus centers around a light-proof housing with side walls tapering rearwardly towards each other. At the front ends, a light shield surrounds a special translucent screen, said to be durable and weather-proof with radical improvements in elimination of glare, distortion, and rich reproduction of color tones. The shield has diverging side walls which extend forward from the housing.

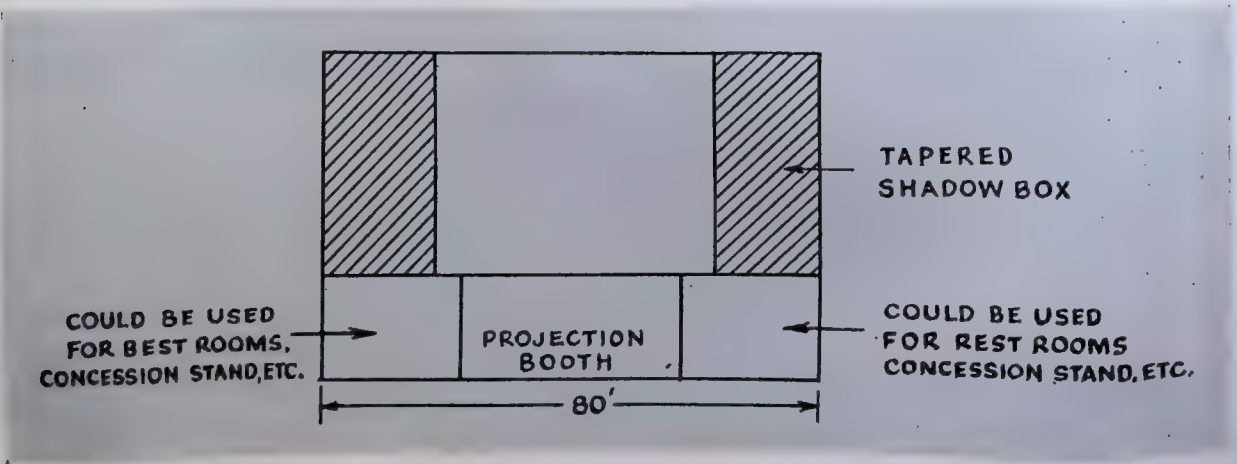
The projector is located at the front end of the housing directly under the screen. The image is reflected onto the translucent screen, through the rear-projection method, by a mirror so situated at the rear of the housing that as projection beam strikes it, it is carried forward to the viewing surface. The screen is moved longitudinally of the shield on tracks so that, during daylight hours, it may be positioned in such a manner that it will be shadowed by the shield; as the intensity of external light decreases, it may be moved forward to increase the horizontal angle from which an image on the screen may be viewed.

The shield used in this scheme does not, of course, represent any particular novelty because it is merely another application of the "shadow box" principle, which has been used in department store displays and other exhibition projects for quite some time. The unique feature lies in the movability of the screen on tracks so that it may be adjusted in position in accordance with light conditions. This asset would seemingly enable a drive-in operator to start a late afternoon matinee between four and five o'clock with the screen positioned at the extreme rear of the housing. At such a time, visibility would be limited primarily to the center sections of the ramps, but there is good reason to believe that these spaces would more than suffice to accommodate an afternoon crowd. As the light of day gradually faded, the operator could move the screen slowly forward until it reached the very front of the housing upon the descent of total darkness. The area of visibility from each ramp would, of course, increase simultaneously with each forward movement of the screen until a clear view from every section of the theatre was attained when the screen had reached the end of the track.

The use of rear-screen projection seems to be an intelligent and practical drive-in innovation because it does away with the necessity for a projection booth situated in the ramp area, and thereby allows for use of the space normally occupied by the booth for cars. There does not appear, however, to be any logical reason why the projector in the Corso plan could not be located directly behind the screen instead of below it. By use of the ordinary Trans-Lux method, the image could be projected from the rear without the necessity for the reflective mirror required by the projector's present situation below the screen.

Aside from doing away with expensive screen tower construction, the Corso plan also embodies a number of other prac-

BELOW: A VIEW FROM THE RAMPS showing the proposed location of the projection and utility rooms.



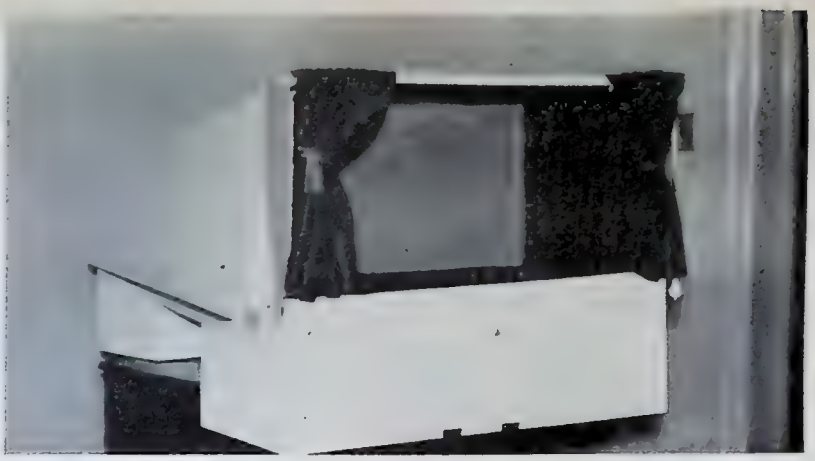
tical features which lend it a great deal of merit for serious consideration. First of all, provisions have been made for extra room on either side of the space housing the projection equipment which may be used for restrooms, confection stands, storage space, etc. Secondly, the tapering of the housing can be continued to a point where its roadside ends form a logical two-sided attraction board for selling the current show, and thus all heavy electric wiring may be retained under one roof. Similarly, the 90-foot long side of the housing provides two effective locations for name and display sign lighting with its wiring again concentrated under the same roof. Finally, by using one side of the housing for entrance and the other for exit, the main boxoffice may be connected to the housing, so that current island types can be eliminated. Since it will thus be possible for the manager's office to adjoin the boxoffice, greater security measures can be taken for the protection of cash than are now possible when boxoffices are often situated at some distance from the theatre office and safe.

Conclusion

In addition to those already described, the Corso plan opens a broad range of drive-in structural and operational possibilities above and beyond the consideration of making daylight shows feasible. It is conceivable, for example, that the shadowbox housing of relatively light construction might be easily superimposed on top of a permanent building containing all the theatre's facilities, with a heating plant to maintain an even temperature the year round. Equipment could be readily stored in such a building without the need for the laborious seasonal maintenance procedures now required. Properly secured, such a building would be as safe against burglary and vandalism as any normal roofed theatre.

The centering of all construction and equipment in one building would also do away with the separate structures with separate foundations, wiring, plumbing, etc., as presently needed for housing of offices, projection rooms, confection stands, screen tower and boxoffice, and thus provide a more integrated and better managed operation. By the same token, the centralization of facilities would enable them to draw their power requirements from the same transformer, and thus bring immense savings in electrical costs.

In short, the ways in which the face of the drive-in as it exists today could be altered by such a plan are limited only by the imagination. Once ideas similar to those suggested in the Corso method have taken definite form, the drive-in may well change notably in character from a segmented to a closely knit operation.



SCALE MODEL in the possession of Mr. Corso shows conventional draped proscenium that might result.



SIDE VIEW of the scale model shows the good sign areas, should building right angle to highway.

Monkey Villages as Promotional Aids

Antics of Ezell Circuit Animals Delight Young and Old to Boost Receipts and Confection Sales

BRIEF: *While there are many people who do not concur in Darwin's renowned Theory of Evolution, they do, nonetheless, feel a peculiar affinity toward the apes . . . These skeptics join with others in making the monkey cage in any zoo the center of attraction . . . for their curiosity and admiration is particularly aroused by the semi-human actions of these intelligent and playful animals . . . People of all ages often stand in front of monkey enclosures for hours . . . as though entranced by the performances of these remarkable creatures.*

It seemed logical to showman Claude Ezell that monkeys would exercise . . . in drive-in theatres . . . the same magnetic force which they exert in zoos . . . A painstaking study of monkeys and their habits lent the idea workability . . . so an experimental monkey village was constructed at the Cactus Drive-In, Pharr, Texas, in the summer of 1949 . . . The crowds which greeted the animals . . . and also poured more dollars into the boxoffice and concession stands . . . led the Circuit to build similar villages in other operations.

This is the incredible story of how the jungle came to the drive-in . . . bringing with it a promotional value exceeding even the wildest dreams of its explorers . . . An intriguing tale of clever showmanship, it discusses the manner in which the theatres care for the monkeys . . . and how the monkeys, in turn, repay their benefactors.

By Albert H. Reynolds
General Manager,
Claude Ezell and Associates

The same inspirational genius which has made him one of the top leaders in the industry was responsible for the birth of the monkey village idea in the promotion-minded brain of Claude Ezell, president, Claude Ezell and Associates. Convinced that monkeys would draw the same crowds and attention in drive-in theatres as they do in zoos, he requested the writer to make a study of the subject with an end to the practicality of constructing monkey villages at our theatre sites.

After many hours of reading countless writings on monkey housing, habits, care, etc., I made a trip to the San Antonio zoo to observe the animals first-hand. The keeper of the zoo helpfully provided the answers to many questions about the history of monkeys and their particular problems which cropped up in connection with our proposed undertaking.

Subsequently, Frank Buck and "Snake" King, two men well versed in all phases of animal life, supplied additional helpful information. Armed with this knowledge and confidence in the essential soundness of the idea, we proceeded to formulate plans to build monkey villages in nine of our drive-in theatre locations. It was certainly a new experience for a theatreman and the old saw "Nothing ventured, nothing gained" applied.

The First Village Opens

The first monkey village was opened June 19, 1949, at the Cactus Drive-In, Pharr, Texas. Over 1,000 children gathered around the village to observe the antics of some fourteen ringtail, pigtail, and spider monkeys from South America and a Gibbon ape from South Africa. Since opening day a number of other types of monkeys, including the Rhesus, Diana, African Green, Sooty Mangabey, Java, and Baboon varieties, have been added. The majority of the animals were acquired from Treflichs Pet and Animal Company, New York, or from "Snake" King in Brownsville, Texas.

Other Villages

The success of the Pharr opening was matched by the unveiling of a similar monkey village at the Trail Drive-In, San Antonio, June 27. The day was a particularly auspicious one for the occasion, since the theatre was also celebrating an anniversary. The birthday festivities, which included a stage show and giveaways, in addition to the regular screen program, drew a particularly large crowd to witness the opening of the monkey village. The throngs of adults and children on hand accorded the monkeys a rousing reception which made the entire day a memorable one indeed.

Other villages, opened shortly thereafter at the Circle Drive-In, Waco, the

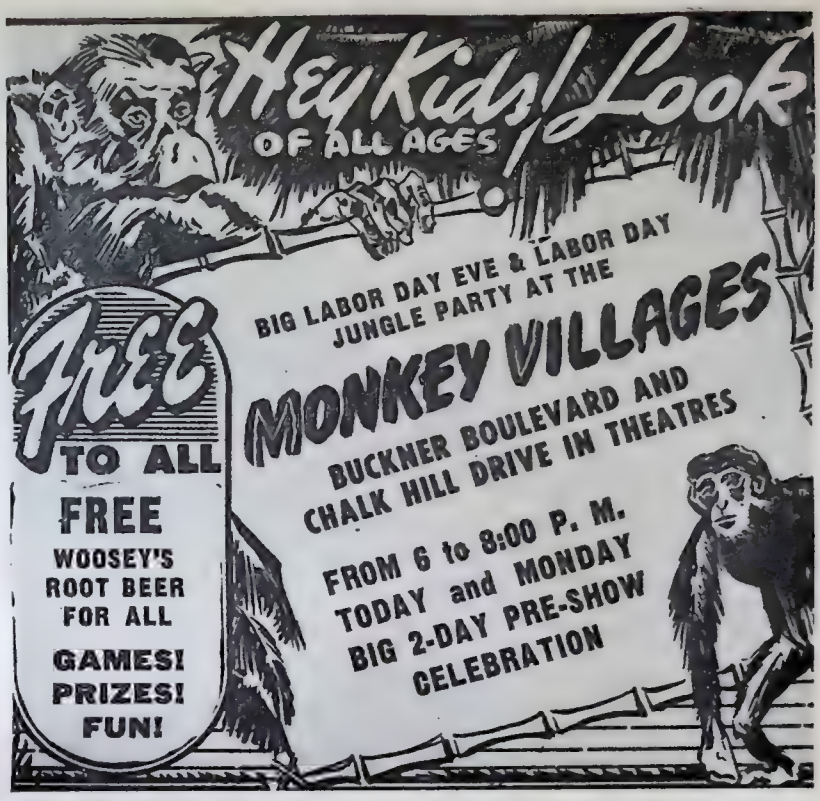
THE MONKEY VILLAGE at the South-Main Drive-In, Houston, Texas, is roofed with palm leaves with the open, wire-covered, sides providing a good view for hundreds of potential patrons. Lawn tables, with built-in benches and lawn umbrellas, offer an inviting spot to sit and have a sandwich or sip a drink while watching the monkeys cavort about. The central appeal is not only to children but to adults too.



South Main Drive-In, Houston, the Surf, Port Arthur, and the Chalk Hill and Buckner Boulevard Drive-Ins, Dallas, attracted hundreds of people, young and old alike. The monkeys, in appreciation of the attention paid to them, reciprocated by performing all their antics, to the sheer delight of onlookers. Scores of visitors spent hours watching the animals cavort in their singularly mischievous ways.

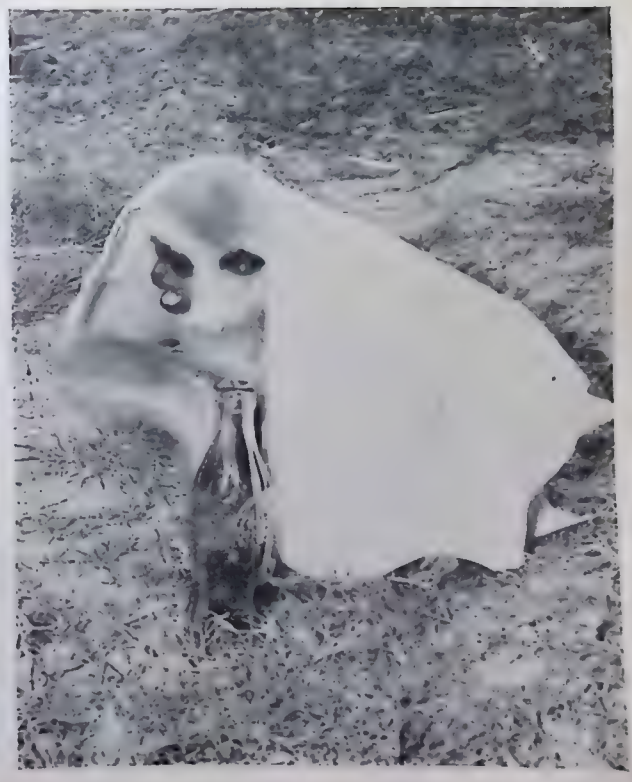
The monkey village opened July 31 at the Chief Drive-In, Austin, however, included an added attraction for juvenile patrons at its opening. A miniature train, since moved to San Antonio, was set up on a tract approximately 50 feet away from the village itself. The gas-powered train, which ran entirely around the monkey cages, had four coaches to accommodate four children each. In order to create the illusion of a trip around the country, signs with the names of various cities, such as Dallas, Chicago, New York, Los Angeles, and San Francisco, were placed at various points along the track. The train left and returned to a small platform similar to the type seen at small country railroad stations.

Between the train track and flagstone patio containing the monkeys' cages a number of tables and benches, shaded by huge lawn umbrellas, were set up to provide picnic facilities. This recreation area, which also included a maroon and cream snack bar, was entirely surrounded by a fence of cedar logs. The whole enclosure was linked to the main theatre area by a picturesque rustic bridge.



ADVERTISING is closely interlocked with the building of a Monkey Village. No charge is made to view the monkeys between 6 and 8 P. M., and during this holiday program there were even free prizes and free drinks advertised in the special display ad (above) that ran in Dallas newspapers. Below (left) is a Sooty Mangabey going through his near human antics that would be difficult for a human to duplicate at the Cactus, Pharr, Texas. Below (right) is another Sooty Mangabey playing Ghandi with a hand towel. No doubt what are peeking out from underneath are "the paws that refreshes."





Housing Facilities

The monkeys are housed in cages, 32' long, 16' deep, and 12' high, with two-inch pipe used to construct the frames. All four sides of each frame have been covered with welded wire mesh (1" by 2"), with one-inch pipe used for middle stringers. Each cage is equipped with a number of swings, three-quarter-inch pipe bars, which extend from side to side approximately six feet above the floor, and several perch boards, for monkeys like to swing and sit above ground level.

The cages are built on a concrete center surrounded by a four-foot wide grass plot. This border is separated from a concrete walk of equal width by wire fencing attached to white wooden guard posts and railings. A 10-foot overhanging canopy protrudes from the tin roof, which is supported by cedar posts, to shade spectators viewing the animals. Each village area is located 200 or 300 feet from the highway to make parking in front possible.

When cold weather approaches, all the monkeys from the various theatres are removed to Pharr, where the warm climatic conditions they require prevail the year round. Special housing accommodations have been built for wintering the entire group in this location.

Care of Monkeys

The primary responsibility for the health of the animals rests in the competent hands of local veterinarians, who have inoculated the monkeys against every known disease to which they are subject, for the protection of patrons as well as the animals themselves. They also maintain a constant and careful watch over the physical condition and diet of their charges.

Daily care of the animals, however, is entrusted to a single individual who is usually a regular caretaker. He feeds the monkeys twice a day—between 9 and 10 A. M. and between 5 and 6 P. M. Their food consists of: bananas, peeled and cut in several parts, apples and oranges cut in quarters, green vegetables, milk, bread (can be stale), and plenty of fresh water at all times. It is estimated that the average cost of feeding the monkeys in each village approximates 75c a day. The wives of some theatre managers have, however, brought this figure down closer to 50c by making oatmeal and saving bread and vegetables from their table for the animals.

Aside from feeding the monkeys, their guardian must keep their houses continuously clean. The pans in which he gives them food and water must be cleansed frequently for sanitary reasons. Where several monkeys are located in the same cage, two or three pans should be used for food and the same number for water.

BENEFITS OF THE STUNT

Advertising Value

The original assumption—that monkeys would draw crowds to theatres as they do to zoos—has borne fruit at every drive-in where a monkey village installation has been made. Droves of people, who might not ordinarily have visited the theatres as frequently, have turned out with increasing regularity to see the monkeys along with the show. The fact that the monkey villages are accessible to non-theatre patrons as well has by no means detracted from paid attendance; as a matter of fact, visitors to the villages often become theatre patrons, even though their original purpose in coming centered around the monkeys. Oftentimes people instinctively linger on to see the show after observing the monkeys.



A MINIATURE TRAIN, capable of thrilling sixteen junior patrons with a realistic ride around the Monkey Village and a maroon and cream Snack Bar, was installed at the Chief, Austin, Texas, further increased the juvenile interest. Powered by a gasoline engine it puffed its way over clicking rails through such stations as New York, Chicago, Los Angeles and San Francisco, in addition to its home platform.

Concession Stand Sales

The erection of the monkey villages has aided confection sales to an extraordinary degree. Both the villages and stands are open from 5:30 P. M. to 8:30 P. M., and a large part of the phenomenonal candy and soft drink sales made during these hours may be attributed to the large juvenile element which turns out to see the animals. Since the villages are open at a time when the heat of the day has not yet worn off, adults likewise are eager to obtain refreshments. Furthermore, many families bring picnic suppers along to eat before the show, so there is an added demand for soft drinks and sweets to accompany the meal.

Finally, the monkeys themselves swell confection sales because it is permissible to feed them popcorn, peanuts, and fruit, although gum is not allowed because of its choking effect. Monkey village visitors naturally derive a great deal of pleasure from feeding the animals and make purchases for this purpose from the stands. All in all, the monkey villages have boomed concession stand sales to the point where there is no comparison between the volume of goods moving across the counters while the villages are open and after closing time. Lastly, the extra revenue accruing from the increased sales helps immeasurably in defraying the expense of maintaining the animals.

CONCLUSION

At the present time Ezell and Associates own approximately 162 monkeys with 15 to 20 situated in each village. Although none of the monkeys on display during 1949 were offspring of the original investment, a number of young born during the season will increase the number of monkey village inhabitants in 1950.

In spite of the expense and care involved in handling the animals, we feel that they are a profitable investment because of the crowds they draw. The monkeys attract as many, if not more, adults as children, and the ample facilities available in front of the cages do away with the parking problem—a factor which might well deter older people.

To the writer's best knowledge, we were the first in the country to install such a system, and we can truthfully say that the results have been well worth the effort and expense expended. In short, although they may appear to be a somewhat novel way of doing so, the monkey villages have proven a sound and profitable promotional aid to show business.

ABOUT THE AUTHOR

Albert H. Reynolds, a native Texan, has had a long and colorful career in show business. From his start with Interstate in 1923 he worked up to a post where he supervised all of the Circuit's 14 houses in San Antonio. He left the organization in April, 1946, to become general manager of Claude Ezell and Associates.

Reynolds is married and has an attractive 17-year-old daughter, Marjorie Ann, who is enrolled at Hockaday College for girls. He is presently a member of the board of Variety Club, Tent 17, Dallas.

Special Advertising of the Drive-In

A Review of the Promotional Methods Used by One Manager Which Should Prove Suggestive to Others

By PEARCE PARKHURST
Managing Director
Lansing Drive-In, Lansing, Michigan

BRIEF: ***Scientific tests have shown that the human memory is a relatively poor apparatus for the retention of names over a long period of time . . . This important psychological factor is unquestionably responsible for the expenditure of millions of dollars yearly in advertising already well-known products . . . from toothpaste to tractors . . . as well as new ones . . . The public . . . lest it forget . . . must be constantly reminded of the name and virtues of leading brands of goods . . . if a constant purchasing volume is to be maintained . . . through all the techniques which the advertising world has at its command.***

This necessity for persistent promotion is as applicable to the drive-in as it is to any other product or service . . . The outdoor theatre has passed from the "novelty" into the "platitude" stage . . . and cannot, therefore, count solely on its unique open-air features to draw the crowds . . . No matter how firmly it may have entrenched itself in its community, the drive-in must . . . through every available means . . . keep its name constantly before the moviegoing populace.

There are an infinite number of ingenious ways in which the outdoor theatre can be advertised . . . and some of these methods . . . not at all feasible for the indoor theatre . . . lend themselves particularly well to the drive-in . . . The following article . . . dealing with the techniques employed by an enterprising Michigan manager to sell his theatre . . . is presented in the light of its possible idea value to other operators.

Since its birth, the drive-in theatre has presented a field of advertising possibilities that have tempted publicity men as the apple did Adam. Outdoor theatres had to be introduced to a public already trained to indoor entertainment. As a novelty, its life would have been short. Therefore, the drive-in had to become a family institution, a well-established habit.

The man with the bag of tricks had to point out the resemblances of the two cousins, then show how infinitely better the drive-in was—and is. He had to lure 'em in and keep them coming back.

Fresh air was an obvious advantage, but no lure to the children, and little to the rest of the family. But staying in the car assured the parents of being able to keep track of their young. The group could come together and stay together. And for once, Pop wouldn't have to circle the block hunting for a parking place while the rest of the family took in the feature.

So here was the start: no parking problem, come in a group and stay together. Movies under the stars. Then, for the skeptics, movies in moonshine or rain. It didn't take a smart publicity man long to realize that the patrons of his theatre liked being able to come as they were. "Come as you are!" rang his copy. "Relax in your car. Smoke if you like."

Another bit of Americana was being born. The drive-in, meantime, was having growing pains of its own. Loud speakers were sometimes set up on each side of the screen. To make the sound track audible to all the cars in the area, the volume had to be tuned up high. This carried the sound not only the length of the parking area, but also into the neighboring homes.

This was the case at E. M. Loew's Open Air Theatre in Methuen, Mass. In 1940, when the neighbors complained, we installed individual speakers. These were the latest thing, a round affair resembling an old-fashioned radio speaker.

These were passed out to each car as it entered. One attendant placed it on the window, another plugged it in at the ramp. At the end of the show, the driver had to back up in order to pull the jack out of place. Then he could drive to the exit and wait in line to hand in the speaker.

As the speakers were gathered in, they were hung on a rack, then transferred to the original starting shed. This did nothing to speed up the departure of the audience, although it provided an effective check on the speakers as each car had to turn one in.

Outdoor theatres were a novelty then, and although the management struggled with landscaping, grading, and advertising, the public came of its own volition. Old pictures drew in crowds, and the venture was proving more profitable than many a theatre operator realized.

Drive-ins were catching on at the beginning of the war; there was a scramble for good locations. Then building restrictions set in, and there was a painful quiet about the infant industry. Not until late in 1945 did a roar go up.

But the war years produced a by-product, the open-air walk-in theatre. As replacement depot officer in special services, I managed five of these in Malir, near Karachi in India. While we played the latest pictures (16mm) to capacity crowds, there were no facilities for autos, and the troops sat on specially erected wooden benches.

THE AUTHOR, seated in his small but well appointed and orderly office in the Lansing Drive-In.



THE LANSING DRIVE-IN

After the war, I went back into publicity work for indoor theatres. Eventually, I wanted to get some fresh air, and, on April 2, 1949, I accepted an appointment as managing director of the Lansing Drive-In Theatre in Lansing, Michigan.

Here was a field with unlimited opportunities to try out new plans which couldn't be applied to indoor theatres. With 14 years of theatre management behind me, I fully appreciated this. Ideas began popping like corn over a hot fire.

First, there was a slogan to be printed on cards and stationery: "Ours is the mission of making people happy—what a pleasure to be so engaged." It sounded good to me, and I meant it.

Advertising the Opening

Six days before the opening, I walked into Lansing. Gently speaking, there were a number of things to do. First, the phone had to be connected. Then the work began of planting ads and readers in the daily and two weekly papers, and contacting radio stations. This gave us several plugs daily on both stations to let everyone know about the opening.

Then came a trip to the sign artist for a double banner to erect over the top of the jeep. During the season, our jeep proved to be a thing of beauty and joy. It was a mobile ad, provided transportation for the manager, served as a grader, fetched gas for stranded patrons, and towed away cars that wouldn't start of their own accord.

Naturally, no showman would consider his opening complete without inviting the governor. While he was unable to come for the ribbon-cutting ceremonies because of previous commitments, he sent a letter of regret.

Next we turned to an old reliable in the advertising field: a plane trailing a tremendous banner announcing the gala opening. Then we spread 200 window cards over a radius of 25 miles.

Restaurants in Lansing and nearby cities were contacted, and several hun-

dred imprinted menus were left at each one to announce the opening and suggest a visit. Directions for reaching the drive-in were included.

A natural for advertising is the bumper card; we put 200 of these into service in and around the city. The mayor was invited, but like the governor, he had other commitments.

Window displays are as important to the drive-in as to indoor theatres. Our sign artist made up a model of the drive-in theatre, and this was placed in the window of a downtown store, together with a display of miniature automobiles (on sale in the store). The model was made so that titles could be changed on the marquee.

Another eye-catcher is the animated display with neon lights. Ours was a large electric clock with a six-change panel beneath it to sell the attractions and features of our drive-in.

In the series of teaser ads in the paper and on the program a "free souvenir" was generously advertised, and we found our patrons asking outright for them on opening night.

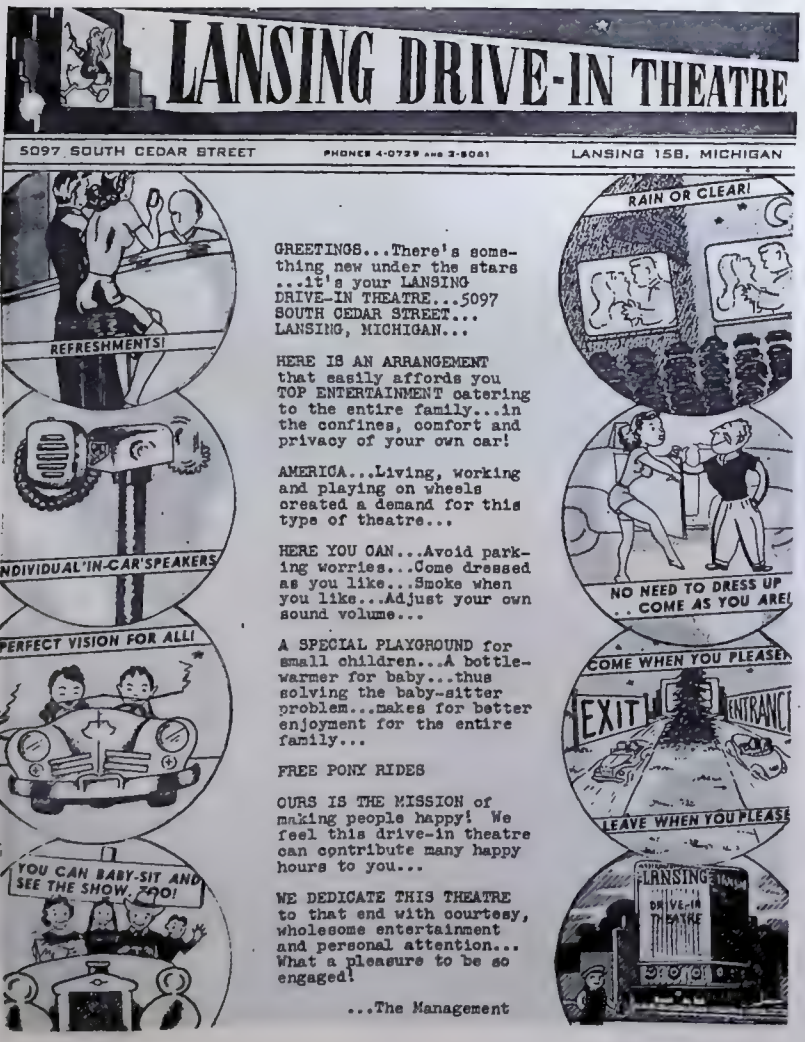
Give-aways are a sure thing: everyone likes something for nothing, and they cost little. Last season our souvenir was an emery board and orange stick, wrapped in cellophane, and bearing the name of our theatre.

Opening night was chilly, but the advance campaign netted us a complete sell-out.

Continuous Seasonal Practices

Institutional advertising was kept up throughout the season. Single and double books of matches were passed out at the concession stand and at leading restaurants in town.

Children under 12 were admitted free, if in a car. This is a mighty selling point for any drive-in. One of our patrons was a truck driver who brought a truck full of children. We parked the truck in the rear so as not to obstruct vision, and welcomed the entire truckload of children in the name of goodwill.



A CARTOON FLYER, or throw-away, was used successfully to introduce the many unorthodox drive-in features to the people of Lansing and its surrounding areas. The cartoon treatment helps selling copy.



CARTOON BORDERS around newspaper advertisements are repeated periodically in order to catch the eye and humorously remind patrons.

Any theatre needs the goodwill of the children, who are today's persuaders and tomorrow's patrons. For this reason, I have always tried to provide extra stunts that will make the youngsters want to come. On Easter Sunday, the first 500 children attending the show were given a chocolate Easter egg and a pink marshmallow bunny wrapped in cellophane.

The children thought it was a fine idea. Phone calls came in with inquiries about the free Easter candy. The children's give-aways were to become a habit. We gave away candy one night, a balloon another, then a cricket or a whistle. Soon the children expected a gift when they came. Give-away items can be had for from 40c to $1.00 a gross.

A drive-in theatre offers the family many advantages which no other can. We constantly plugged free admission for children under twelve. I had special reverse mats made up with another tremendous selling point: "Save the cost of a baby-sitter."

This is of great value both for convenience and because people are becoming increasingly budget-conscious. We had a free baby bottle warming service at the refreshment stand to carry out the idea—something few, if any, indoor theatres do.

For adding extra sparkle to our daily ads, we found a mat service to be invaluable. For a nominal amount, this service sends not only the ad proof sheet, but mats as well.

Weekly programs are well worthwhile. Starting from scratch, we built up a mailing list of 500 the first season, and hope to double this for the coming year. We bought an inexpensive addressing machine to speed up output as the list grew by leaps and bounds.



HOLIDAYS present intriguing opportunities for special events and for promotional stunts that require forceful display advertising.



Free readers and scene mats are a necessity for any theatre. For the best results, a personal acquaintance with the editors of the Sunday and daily papers can't be topped.

All of our ads carried the phone number of the theatre, just in case someone should want to call for information about current attractions—or give-aways. We had so many calls that we found it necessary to install a second phone. Next season we plan on a trunk line.

We have a good run of pictures at our drive-in. We play most major product seven days after second run. We also play a first-run news which has proved very profitable. Nary a program goes by without the screening of a color cartoon, so popular with children of all ages.

On weekends, we have double features, which help to build the family trade. Every Saturday night we feature a "Late Owl" midnight show. For this, we book in a special picture. Variety of type helps sell this: one week a western, next a horror picture, etc.

Horror shows prove very popular, but it is doubtful whether there would be enough for every weekend. Then too, the horror film might wear out its welcome.

Special events in the news always receive attention in our newspaper, radio and poster advertising. Title bouts, the World Series, the lifting of the Berlin Blockade, and college football all figure in our promotions.

Miscellaneous Stunts

Late in the season, when the novelty of the drive-in wears thin, there is need of a special boost. Since the children are our natural allies, we decided on an always sure-fire drawing card: free pony rides. Far-fetched as it may seem at first mention, this proved popular and practical.

As soon as we had our three Shetland ponies, we began to plug this feature in all our ads. As the cars entered, a free ticket was given to each child in each car. Formerly, we had opened the theatre 15 to 30 minutes before show time, but now we had to open a full hour ahead. Children lined up in front of the screen, waiting for their free ride. The success of the stunt merited having special ads and mats made up to publicize it.

Drive-ins, just like their indoor cousins, are sometimes sold out. The indoor theatre displays a Standing Room Only sign. The Lansing Drive-In has one that says Parking Room Only.

Our PRO sign goes up when all of our ramps with speakers are taken. At the rear of the theatre, there is room for several hundred cars to wait for the next show; from there they can see but not hear. Of course, however, a theatre could have a couple of large loud speakers available for sell-out nights.

On these occasions, we had an attendant hand out cards to each driver:

PARKING ROOM ONLY
We're sorry—Honest!
Our apologies for all our speakers being taken.
There will be a wait for speakers at our inside parking area!
But we feel certain you'll be glad you waited.
They say it's a really swell show!
The Management
Lansing Drive-In Theatre

Nearly every man loves baseball, and nearly all the drivers of cars to the theatre are men. To appeal to the men, we had a special give-away made up. This piece of institutional advertising was a

COMEDY has universal appeal in reducing dry facts to humorous understanding. It is certain that a message conveyed in this manner is more thoroughly read and longer remembered by the potential patron.







SPORTS EVENTS (above) appearing in the regular news reels can stand heavy advertising, and get it. Bumper cards (below) are obviously adaptable to drive-ins and are widely used allies.



1949 schedule card of the American League-Detroit Tigers at home and abroad, plus a year calendar—with a nice plug for the theatre, naturally.

Not only the men liked it, but the women too. Although it was an inexpensive give-away, it was something that was not merely read and tossed away. As it was compact, it was used both for the baseball schedule and for the calendar. It proved to be so popular that it is worth consideration for any theatre.

One of the most basic points in drive-in advertising is the cartoon-type ad which stands out nicely in the theatre page. Ours plugged: no parking worries, movies under the stars, hot dogs and refreshments, we all stay seated together. The words "relax in your car," "smoke if you like," and "come as you are" undoubtedly sold many people on the drive-in.

When our anniversary week arrived, we took full advantage of it, running special programs, mats, and ads in the papers and on the radio.

Although the number of transient patrons is low, we had an oversize clock painted on a 40x60 sheet of cardboard, with the legend: "Good evening. Box-office opens at—."

One of the biggest hurdles we had to make was explaining that the drive-in was a money-saver, even though we charged a higher price than the first-run theatres. Our price is 60c, including tax, against a top of 55c at the first-run theatres. Despite our added services, our price had to be as low or lower than any other in town. I managed to boil it down into a 30-word message to sell the idea:

"LOW IN PRICE! DID YOU EVER STOP TO FIGURE IT OUT? Dad and three youngsters (under 12) get in on one adult ticket. Add it up and compare."

The idea caught on like measles; we went so far as to get "rubber bucks" made—"To make the dollar stretch"—with the message on them. It got people talking and was a terrific stunt. We received several hundred requests for the "rubber bucks" by mail.

On the Fourth of July we made our own kind of history. Our stunt could never be used by an indoor theatre, but it can sell out your drive-in, bringing in scores of new customers. This is the mammoth fireworks display and exhibition.

To get public reaction of the type of program people want, we sent out poll cards asking what shows they would like to see return. This is another sound way of building up a mailing list.

As in the indoor theatre, the cartoon carnival is well liked and well-attended. We used this idea several times during the season. We sold it via special screen trailers, special newspaper mats, and a special display erected in front of the box office, where it could be seen by every carfull of people entering the theatre. These campaigns were put on for a full ten days before the presentation.

By now, the Lansing Drive-In had become something of a family institution. In a nice way, we were being watched; people expected us to come out with something new. In order to keep up interest, we gave them something to talk about as often as possible.

In view of the success of the pony rides, we decided to cater again to the children. The children needed a free playground to make the theatre a children's heaven. We accordingly installed swings (even the teen-agers like them), teeter-totters, sky rides, and a merry-go-round. Then we had to set up two free horse-shoe pitching areas for the adults.

Then came the dance pavilion, calculated to teach any theatre man a lesson. A juke box was set up by the chained-off area, and the dance floor was glazed with waterglass and a special powder; but no one danced. We offered free passes, gave away Hawaiian leis, and changed canned music to live music



PONY RIDES attract the small children who bring their paying parents. And at the year's end the ponies themselves furnish a tremendous couple of nights as give-aways the children love.



by a Hawaiian trio and a hillbilly band. People crowded up to the dance floor; but no one danced.

Perhaps our patrons were too full of dinner; more likely they were too shy. The dancing area, however, will probably become a shuffleboard field, so all is not lost.

If dancing is a failure, there are still hundreds of other inducements that will bring new customers to the drive-in. Why not, I thought, have a small stage attraction? This could be hooked into the individual speakers, if desired, although we found that the people in our locality preferred to get out of their cars and bring their children down to the entertainment area.

Before the show, we presented a small

but popular hillbilly band from the local radio station. The success of the band encouraged us to have on stage a Hawaiian group later in the season. This was plugged by giving out real leis in advance of their appearance.

By the end of August, we were readying for our Fall Festival of Hits, and for Labor Day we held another fireworks display—again to turn-away business.

Special Picture Promotion

Our largest advertising campaign came after Labor Day, when we booked in a good exploitation picture from Hygiene Productions of Wilmington, Ohio. All the old tricks and several new ones went into this, and won for me the $500 first prize for 1949 on this picture.

In this collection of ideas are many which can be used by theatre managers for any show. In a way, it is almost a summary of what can be done on a limited budget. It covers many mediums, introducing stunts which can be varied for any occasion. A rubber stamp, for instance, can bear the name of a show or a theatre and be used on everything from the daily mail to shopping bags in stores.

Each of the 700 odd speakers inside the theatre bore a label stating: "Mom and Dad coming soon to the Lansing Drive-In Theatre." Every theatre and concession staff member wore a silk badge announcing the coming of the show.

Two rubber stamps with teaser copy were used to imprint all outgoing mail, including a 500-piece weekly mailing list. They were used on paper bags in grocery, candy, and drug stores all over town.

Car hops passed out two cases (5,000) books of matches plugging the attraction 20 days in advance of opening. Special copy on the picture was inserted in our electric neon sign clock and run for a full month in advance.

Two weeks before the opening, 1,000 especially printed envelopes were used for our mailing list. Menus bearing information (1,000) were distributed to restaurants. Special letterheads and envelopes were printed up for all outgoing correspondence.

An overhead banner was erected on the jeep, giving opening date, then changed to "now showing." Six "coming soon" banners hung in front of the theatre. Flagpole type banners were made up and displayed at two sides of the entrance and exit to notify all incoming and outgoing patrons of the coming attraction.

A special boxoffice was erected in front of the theatre to handle the advance sale of tickets and to give out information on the picture. On the roof there was a neon sign with "Mom and Dad" blinking off and on. This was run 24 hours a day one month in advance of the opening and throughout the engagement.

In the driveway, there was a sign reading "20 More Days," etc. A banner was placed in front of our regular boxoffice to plug the picture. A special necktie advertising "Mom and Dad" was worn by the manager for a month in advance. This created something of a sensation.

Nineteen days in advance of opening, teaser ads were run in the papers. Ad-

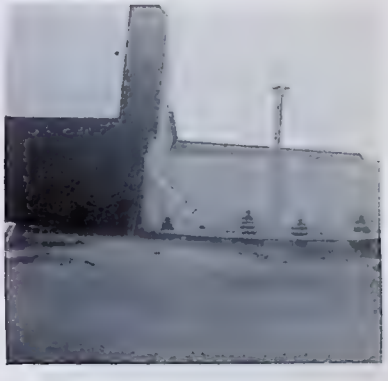




A MILITARY BAND of United States Infantrymen was promoted for one publicity campaign. Below: Dance floors are a washout and next season the area will be converted to shuffleboard courts.

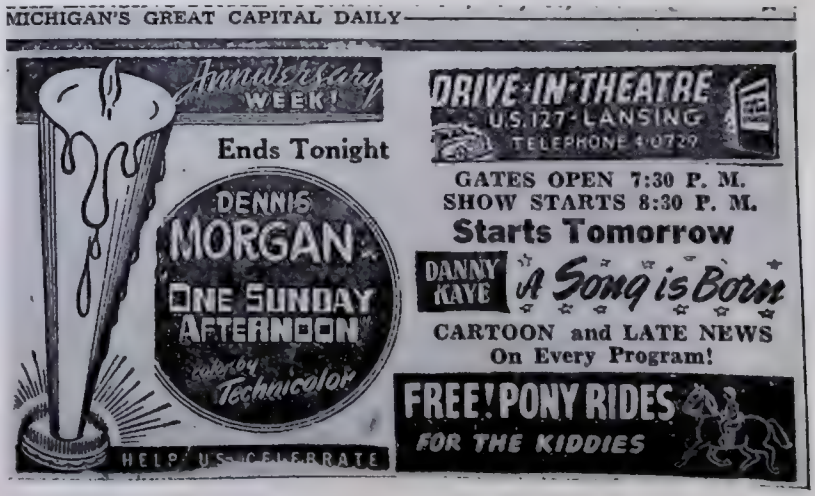


PROGRAM COVERS make good use of the institutional cartoons, plus providing good locations for selling the other special entertainment features to both children and adults.





CHILDREN are catered to with merry-go-rounds, swings and sand boxes, for it is known that each child influences several more adult admissions. As a result "Free Pony Rides" are featured in most of the newspaper display advertisements and in virtually all promotional display directed to the public.



vance plugs were given on our weekly program cards. Two weeks before the opening, one half of the card was devoted to the show. Give-aways were passed out in advance: leather key chain tags, 1,000 combination ruler-blotters (put in offices and banks downtown). Ashtrays and pencils furthered the cause.

Then 30,000 special four page tabloids were put out. Of these, 10,000 were mailed to every RFD and Star route in the county; 18,000 were distributed from house to house, attached to the doorknobs by an elastic band. The remaining tabloids were put out at the theatre and distributed on the streets as an extra by newsboy hawkers.

Four different sets of handbills and a large type herald (circus size) were distributed to drug stores, groceries, put into the two high schools, the state college, and even the downtown parking areas.

Senator Vandenburg, the governor, and President Truman were invited. Illness prevented the senator from attending, but kind notes of regret were received from him, the governor, and the president, who were unable to come because of previous commitments.

Cocktail napkins, coasters, and book matches were printed up for the luncheon. One hundred invitations were sent to radio, press, and city officials.

Then came the well-advertised day. The mayor of Lansing was scheduled to present a gold key to the city to the producer of the picture. At four p.m., the producer and the script writer arrived at the Capitol City airport from Hollywood. A horseshoe wreath of flowers was presented to the producer by a pretty girl. While we were at the airport, a plane took off trailing a banner worded: "'Mom and Dad' opens tonite Drive-In Theatre."

At 5 p.m. came the buffet meal at a local restaurant with about sixty guests present. This luncheon, the music, even the flight for the guests were arranged at no cost to the theatre!

After the luncheon, the parade formed in front of the restaurant and was led to the theatre by the 46th Infantry Band. At 7 p.m. we held a ribbon-cutting ceremony. Then there was a band concert before the premiere showing. After the screening, reporters and invited guests attended a cocktail party at a nearby hotel, and this again cost us nothing.

Good reviews and writeups preceeded and followed opening night. A three-column, front-page story broke the front page of one paper. In all, we received 133 inches of free space during the engagement. A free news story on the picture was used on the radio in a regular newscast.

This was a sensational picture in its subject, yet we received letters of thanks from parents and letters of endorsement from a local minister and the township clerk.

The picture was booked for a week and held over for the second week. That is no short run, when the longest engagement in the history of the theatre was three days. Business was excellent despite rain and cold weather. All boxoffice and attendance records were broken.

Even the foregoing is not a complete summary, for the small items ranged from "Mom and Dad" menus for the luncheon to the umbrella sported by an attendant, guaranteeing a showing, rain or clear.

THE WHITE HOUSE
WASHINGTON

September 16, 1949

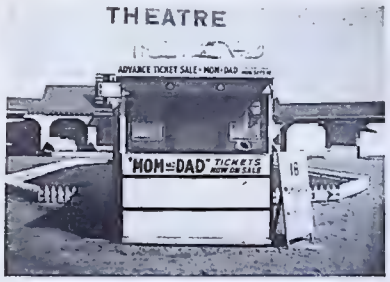
My dear Mr. Parkhurst:

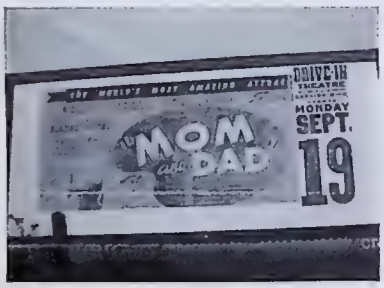
The President has received your message of September fifteenth and has asked me to express his thanks for the cordial invitation which it

~~conveys. While this kind thought is much ap~~

PRESIDENT TRUMAN, and the Governor of the State, were invited to the opening of the exploitation picture "Mom And Dad," and dutifully acknowledged. With a long run expected, lunch room and dinner menus covered the city, and a special booth was set up for the advance ticket sale. Billboards and signs all drew attention to the coming attraction, thereby making this an area event of some magnitude.









CONCLUSION

In this, as in all publicity, the give-away rates high as a goodwill and interest builder. Novelties are inexpensive; tiny glass elephants, for instance, more than pay for themselves as give-aways for Indian or African films when they are used as lucky charms, if brought to the theatre during the showing of the attraction. Then, for a comedy, there is the free coat hanger and cigarette lighter offer. This consists of a nail and a match enclosed in an envelope with copy "compliments of" and name of comedian playing in picture, playdates, theatre credits, etc.

These plugs can be used by indoor theatres or drive-ins. Unusual ads are adaptable to either, as well. An occasional personal touch can make ads more attractive and interesting. These can be varied a dozen ways: quotes by patrons, good comments from the ushers, boxoffice girl, the janitor, etc.

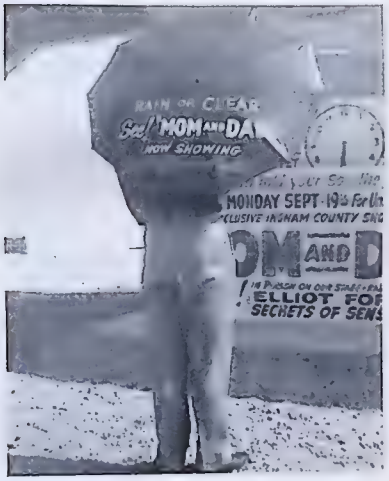
"I'm the projectionist—the man you never see. But I'm the man who runs the machines, so I'm pretty much up on what's good. And I think—is a swell show."

When you do the unexpected, you're selling your theatre. You might, for example, carry on a correspondence with Santa Claus, asking for a good show for your patrons. Admit you have had some lemons in your day. Santa might reply that he has something really great, no names mentioned. Follow this teaser with a "thank you" and further inquiry. This can carry you up to your announcement.

Indoors or out, you have to make friends with the people. Publicity must



DURING THE RUN the attraction board screamed forceful selling copy. Street ballyhoo, in the form of an umbrella carrier on a clear day, drove home the "clear or rain" nature of the performance in a novel way; while newsboys distributed tabloids as part of the comprehensive campaign. Bus cards were also used to remind both their riders and the motorists on the routes they travel. This was a prize campaign.







build goodwill as well as curiosity. It has to be carried out with courtesy in the theatre. Promotion means getting people to think — and talk — favorably about your theatre. What is begun in the newspaper and on the radio must be completed at the theatre.

No one likes to be fooled. Therefore, all publicity must be honest in that it does not disappoint. Sensationalism that doesn't carry out its promise is bad business. It is far more practical to imbed the truth in the minds of every reader and listener. "This is good entertainment. This is a fine theatre."

Spread your ideas and your money. It will bring large returns in free space and free time. The more people hear about a picture at a theatre, the more they will think about it. You see to it that they are introduced to your programs in the newspapers. But why stop there, when your advertising can be carried out in any grocery or drug store? Window displays, special menu sheets, stamped bags, and bus cards can plug your ideas.

When a theatre man breaks away from the traditional or expected way of doing things, he has used imagination; and that is the essence of good business. Imagination can create demand, establish new trends, and even revive faltering business.

Ideas come from thinking, and thinking should be made a habit. Other people's ideas, in publicizing any venture, can be adapted to your purposes. The theatre man who has the energy to route out ideas and the initiative to put them into practice is certain to wind up with a much higher gross at the end of the season. Don't be afraid of ideas; put them to work. And don't be small about it. Go all out for your drive-in!

ABOUT THE AUTHOR

Pearce Parkhurst started in the theatre business 17 years ago—at the age of 14—as an usher at the Union Hill theatre in his home town, Gloucester, Massachusetts.

At 17, on graduation from high school, he became manager of the theatre in Dover-Foxcroft, Maine. Since then, he has worked for several independents and circuits in the six New England States, and in Ohio, New York, Indiana, Texas, Michigan, Virginia, and North Carolina.

Most of this time was spent managing and publicizing indoor theatres. In 1940, he managed the Merrimack Park Drive-In Theatre in Methuen, Mass. He is now with the Lansing Drive-In Theatre in Michigan.

He has written for many trade magazines.

Mr. Parkhurst has won many circuit prizes, awards, and the second prize in the RKO-Borden Milk contest on "Little Men." In 1949, he received the $500 first prize for his publicity campaign on Hygiene's "Mom and Dad."

His home address is P.O. Box 21, Magnolia, Massachusetts.

Operational Methods of a Veteran Drive-In Circuit

A Review of Tips on Good Management as Given By Ezell Circuit to its Individual Operators

By Albert H. Reynolds
General Manager, Claude Ezell and Associates

BRIEF: *A drive-in theatre . . . like any other form of business enterprise . . . must function efficiently to attract the public to the services it sells . . . There is no room . . . or excuse . . . for deficiencies which a little foresight and care can prevent . . . The manager . . . as any other captain of industry, large or small . . . must oversee every phase of a drive-in operation to make sure that the theatre . . . as well as the patron . . . is getting the most for its dollar . . . The manager, in short, must perform the miracle of being everywhere at once to supervise finances, advertising, the staff, maintenance, the confection stand . . . and all the other moving parts of his theatre machinery . . . Each of these integral parts must function smoothly, both individually and collectively . . . and it is his job to see that they do.*

A number of invaluable suggestions . . . made by a circuit, with a wealth of experience gained through successful operation of 16 modern open-air theatres, to its own managers . . . are printed here for the perusal of others who may find them helpful in running their own showplaces on a more efficient basis.

THE MANAGER'S ROLE

The manager of a drive-in theatre is the custodian of a valuable piece of property and goodwill in his community. Upon his shoulders rests the responsibility for looking after the best interests of his showplace and those of the managing company, whether his theatre chances to be a part of a circuit or a single operation. As an ambassador of goodwill to patrons, businessmen and officials of his city, the drive-in manager must be courteous and endeavor to provide the utmost in service at all times, including such little courtesies as changing tires and supplying emergency gasoline to cars which run out in the theatre. It is particularly important that women and children, cripples, and the aged be given every possible consideration, so that they will be perfectly certain in their own minds that they may visit the theatre in perfect safety and comfort.

In order to insure a continuously simple, satisfactory, and worthwhile operation, managers must see to it that their help are well-trained to render efficient and courteous service. Pains taken in this direction will aid managers in achieving the hallmark of good theatre operation—the acme in service at minimum expense. In order to attain this desirable goal, every manager must personally keep careful vigilance over every phase of his operation because, in the final analysis, its success or failure will depend on him.

Finally, in both his business and private life, the manager's conduct must at all times be above reproach. He must keep his personal appearance neat and look well groomed when out before the public. He should join into the business and social life of his community and take a real and sincere interest in its affairs as a conscientious citizen.

Proper Supervision

While managers should, of course, always have an eye out for disturbances in the smoothly running routine of their theatres, it is particularly important for them to be watchful during the period shortly before and following the close of the boxoffice. It was formerly common practice for managers to dismiss ushers at the end of the first show, usually around 9:30 P.M., thus patrons entering between 9:30 and 10 P.M. were forced to shift for themselves. Experience has shown, however, that it is much more advantageous to retain all ushers until after the last show.

It is also advisable for the manager to leave someone in charge of the gate from 10 P.M. until closing time with after-closing tickets. The attendant to whom this duty is assigned should be given a small metal box with a supply of after-closing tickets and $1.00 in change; everyone entering the theatre should be given a ticket stub.

One of the most important managerial tasks falling under the general heading of proper supervision is that of preventing breaches of good conduct. In this regard, a special officer or night watchman (not a lot boy) should be assigned to patrol the lot after 10 P.M., looking casually into every car without disturbing the occupants. He should go from the front ramp to the back ramp and back again, never stopping, so as to prevent any sort of misconduct.

Boxoffice Management

Attention to finances should be a primary concern of every drive-in theatre manager. Not only should the manager arrive in the morning in sufficient time to read and answer the mail and check on the arrival of films, he should also allow himself plenty of time to make a deposit every day, except Sundays and holidays, before noon. Needless to say, a fresh supply of change should be obtained at the same time. Boxoffice reports should be mailed every day and weekly reports should be in the office not later than Monday morning in the case of circuit theatres.

It is a good idea to keep the boxoffice open until 10 P.M. every night, regardless of the length of the feature, so that operating hours need not be cut any shorter than they already are. In cases where a short feature is running and the last showing starts at 9:15 or 9:30 P.M., it is advisable to repeat enough of a third showing to insure that patrons who arrive late will see a complete show. This can be done by having the operator mark the place in the program where he may be at 10 o'clock. By guaranteeing that late comers up until 10 P.M. will still be able to see a complete show, business may be improved to a considerable degree.

Money should be removed from the boxoffice every 30 minutes and only enough left for making change properly. Receipts from sales made after the established boxoffice closing time should be turned in to the manager at the end of the evening and recorded on the following day's records. As a safeguard against pilfering, no strangers should be admitted to the office when the safe is open, nor should they be admitted to the screen building for any reason after the show is out for the night.

Extra Stunts and Services

A drive-in manager who really wants his theatre to achieve success must always be on the lookout for ways and means whereby he can please patrons and draw more business by added services and promotional stunts above and beyond the minimum requirements. One of the Ezell drive-ins, for example, has made it possible for doctors and nurses to be paged on the public address system if they receive an important phone call while attending a show. At the same theatre a man is kept stationed at the entrance to the lot to watch for elderly patrons and offer to park their cars or perform other services for them. The appreciation they have shown for these attentions has been more than gratifying and has attracted other oldsters to the theatre.

There are literally dozens of other ways in which patron goodwill can be cultivated and more business enticed to the theatre. Unique exploitation stunts, special parties, free gasoline to run car heaters in cold weather, give-aways, encouragement of walk-in trade, personal contacts, and other clever efforts which bespeak shrewd showmanship can go a long way toward building up boxoffice grosses in the hands of an enterprising manager.

Miscellaneous Tips

It is a wise manager who makes sure that he is not violating any child labor laws in employing minors without due approval from parents or without meet-

ing other requirements which the laws of his state may insist on.

Since there are few buildings more dismal looking than a half-lighted or dark theatre front, managers should see to it that lights are turned on fully at dusk, regardless of when the boxoffice is scheduled to open, and left on until the boxoffice is closed for the night.

The starting times of both evening shows should be put into any ads the manager schedules in newspapers. Although there may not be room for all this information in morning papers where one-inch slugs are often used, it is a "must" in the afternoon papers.

The manager may profitably make an announcement just prior to the start of the show to advise the audience that there will be a short intermission between shows, during which patrons may visit with friends, visit the refreshment stand, use the telephone, or move to better locations in the theatre. It is important that the announcement be made before the show, rather than at intermission, for the reason that cars are moving at the intermission and its value is lost.

When the arena is unfilled and the back ramps not in use, the manager may have the sound cut off. He should, of course, constantly focus his attention on the quality of the sound so that as nearly perfect a performance as possible may be given.

Lastly, in the event of an accident within the bounds of the property which involves a patron and where bodily injury is suffered, a full and complete report should be made at once to the theatre's insurance company and to the home office of a circuit drive-in. If a doctor's services are required for first aid, the injured person's doctor or the theatre's own doctor should be called. It is a good precaution for the manager to write down the doctor's name and phone number and keep it handy for first-aid emergencies. If a claim is later made by the injured party for damages, a circuit theatre should notify its home office at once. The same form may be filled out to advantage for accidents which involve an employee where an injury is suffered.

DUTIES OF THE STAFF

Pride in having a nice, clean, and properly operated theatre should govern every employee. All personnel should make a conscientious effort to keep their theatre in tip-top shape throughout, in its entirety including the playground. Each member of the staff should be at his designated post at all times, and no one but the manager or his assistant and the designated cashier should be inside the ticket booth at any time.

Attention to particulars of dress is a prime requisite for the staff. Lot boys (ushers) should be uniformed in white coveralls, concession stand personnel in white pants and jackets, and ticket sellers should be outfitted in white pants, double-breasted sport coat and yacht cap.

Car Handling

Before the start of the first show, ushers should check speakers carefully to see that they are all working perfectly. Once this important preliminary is accomplished, ushers should stand by to handle entering cars. When traffic does begin to flow in the gates, it is well worthwhile to have the ushers or other attendants clean the windshields of patrons' cars. Regardless of how good the light is on the screen, patrons viewing it through a dusty or mud-splattered windshield will find the results very unsatisfactory. It is highly important, therefore, to the future of the drive-in business that every windshield is cleaned thoroughly.

It is imperative that ushers be taught the importance of proper parking. Cars with two passengers should always be put on the first three ramps, never a car with three or more occupants. Cars should be parked directly facing the screen with the rear wheels resting at the lowest point of the ramp. Proper parking is the secret of patrons being pleased with the show. As a final note on this subject, ushers should give proper consideration to patrons desiring certain parking places. When possible they should comply with special requests, and when their fulfillment is impossible they should explain why.

An Aid to Traffic Control

Traffic control may be aided by employment of a special officer for the purpose. This individual should report for duty at 7 P.M. and work until 12 P.M., or until the show is over. When he reports to duty, he is first to assist in handling the incoming traffic and getting cars into the theatre and off the highway in safe and orderly fashion, keeping two lanes of traffic flowing to the boxoffice. At the "break" (end of first show), he is to report to the exit ramp at the highway to assist in getting traffic safely back on the highway. At the time of the second "break", which comes after the shorts are shown for the second show and when the feature goes on for the last time, the officer should also stand by to assist in the same manner as outlined for the first "break".

After the second "break", the officer should report to the boxoffice to stand





MODERN OPERATIONAL METHODS lean toward the snap, precision, courtesy and service of the deluxe roofed theatre, even though the patronage of children and family group makes necessary a less impersonal approach. Expert operator Reynolds would no doubt approve of the modern neatness and obvious service potential of this staff at the gate of the Niles, Niles, Michigan, (above) where Manta and Rose run a very high type operation catering to 1000 cars. (Below): Modern equipment, cleanliness and organization are prerequisites of service during the peak load at the Valley, Ontario, Calif., confection stand.

by for its 10 P.M. closing and escort the manager with the evening's receipts under guard to the office. As soon as the receipts are locked in the safe, by 10:30 P.M., the officer should return to duty in the park. He relieves the boy who has been left with after-closing tickets at the gate, closes the entrance gate, and goes inside the park to check on everything. Most of the time he should try to stay within sight of the exit side, which is the only gate open, to keep anyone from "sneaking in".

MAINTENANCE

The importance of keeping the physical properties of a drive-in theatre in good order cannot be overemphasized. The care accorded the upkeep of the outdoor will inevitably be noted favorably or unfavorably by every patron. Since the paying customer must be "sold" not only on the show, but on the theatre itself, it is incumbent upon every staff member to see to it that the showplace as a whole presents a first-rate appearance.

Grounds and Buildings

The grounds of the theatre area must be kept clean at all times, and there is no excuse whatsoever for filth. Paper and other rubbish should be burned daily. Plants must be cared for and watered when necessary. Beds should be kept clean of weeds and grass; and in regard to unplanted areas, ammonium sulformate (amate) at the rate of one pound to one gallon of water, or a mixture of amate, one-half pound per gallon, have been found to be excellent herbicides which will kill grasses and plant life of all kinds. All work involved in caring for the grounds can be divided between the day and night man.

The screen house and other buildings should also be kept constantly clean. Before the first show starts, toilets should be inspected to see that they are clean, in working order, and that the containers have tissues. Chemicals should not be used in toilets, as septic tanks may well be ruined.

Equipment

Since some changeable sign letters fade in the hot sun, and constant handling causes scratches, they should be inspected regularly to see whether or not painting is required. This is an important consideration because sign letters are probably looked at more than any other object in the theatre, and they should not appear shabby.

Little can be done to repair ramps when they are wet, other than keeping holes filled with road gravel. Pea gravel should not be used for filling, as it will not pack. Permanent patching should be done after the weather turns warm and the ground dries out thoroughly. If holes have developed in the paving, it is merely because the top crust is crumbled. This should be covered with asphalt cutback and with a covering of pea gravel over all.

Arrangements made with a reliable supply concern for a speaker reconing service solve the speaker cone replacement problem. Furthermore, since new speakers generally have an unconditional guarantee period, it is a wise procedure to open up the case and mark the installation date, whenever a new speaker is purchased to replace a stolen one.

Playground equipment should be painted about once each year. This task can usually be done by the manager or caretaker. A good asphalt base or aluminum base paint should be used because they will hold up better on metal and reflect light better. In other words, at night a bright paint picks up the light reflected from the screen and makes it more visible in the unlighted playground, thus helping to eliminate the accident hazard.

When outdoor seats are painted, a paint that will penetrate the wood, rather than an enamel, should be used. This kind of paint will both stick and preserve the wood better. A regular crylite green paint is recommended for this purpose.

Since a lot of expense can result from broken pipes, measures should be taken to protect them before the first freeze of winter. Such trouble can be easily prevented by wrapping all exposed pipe carefully.

THE CONFECTION STAND

Since the confection stand forms an important part of a drive-in theatre operation, everything possible should be done to attain the highest profit volume obtainable. This end can be accomplished by correct ordering of supplies, shrewd merchandising, and good supervision of the stand itself. In this last connection, merchandise and supplies of all kinds should be kept locked up when the stand is not in operation. The party in charge of the stand and the manager, or assistant manager, should be the only ones to have keys. Merchandise should be carefully checked out to the stand to avoid haphazard handling and the undue shortages that result.

Ordering Supplies

In ordering hot dogs it is wise to specify the best No. 1 grade. Regular hot dog buns should be ordered in ample quantities periodically.

Another item in the category of hot refreshments, coffee, may be profitably sold at refreshment stands. Many coffee distributors are glad to supply equipment free of charge for handling their coffee. One manager has found it advantageous to mix together a quart of homogenized milk with one of condensed milk to provide good coffee cream at less than half the cost of regular cream. Coffee cream can be placed in syrup pitchers and three or four of them scattered up and down the counter. Coffee sugar should be purchased packaged in individual servings from a wholesale grocery firm.

Hot chocolate and potatoes for "french fries" may also be ordered as profitable concession items. Doughnuts can easily be combined with the former to be sold as a "package" unit, if desired.

In the cold refreshment category, ready-mixed snow cone syrup is usually available in the following flavors: strawberry, cherry, and grape. Cups may be ordered in case lots of 5,000 and spoons in case lots of 10,000. Drip pans may be placed under snow cone machines and stainless steel drip trays under syrup dispensers to catch droppings. It is interesting to note that the sale of snow cones has not hurt the sale of soft drinks or ice cream and is a profitable new source of revenue.

Soft drink syrups as a whole can be ordered locally in about 30-gallon quantities. On occasion, however, syrups may be ordered in wholesale lots from distributors. When this method of supply is possible, orders should be given in even 5-gallon quantities and supplies for 30 days ordered on the first of each month.

A quantity of lemons may be ordered at the same time orange syrup is purchased, for it has been proven that a lemon squeezed into each gallon of mixed orange drink will enhance its flavor a great deal. Crushed ice should be used in orange, as well as other drinks, to make them more satisfying, so a good supply should be kept on hand.

Preparation and Merchandising

Since hot dogs are the only refreshment item requiring much attention, care should be given to their preparation. After they have been duly steamed, a heaping tablespoon of chili gravy may be used to garnish them along with mustard, relish, and onions. The following is a receipe for chili gravy: One No. 2 can chili, same quantity of hot water, two tablespoons of cracker meal, a pinch of chili powder, a pinch of salt, and a couple of bay leaves; the mixture should be put in the container and allowed to simmer. Wax wrapping paper, 12 inches square, is recommended for wrapping hot dogs because it is moisture-proof and does not stick to the hot dog. These wrappers are generally available in case lots of 10,000 and should be ordered by the case.

Special pasteboard carrying trays have been developed for use at concession stands which hold four cup drinks and still allow space for a couple of hot dogs or a box of popcorn in the center. In many theatres managers have promoted a local advertiser to sponsor the cost of these trays so that the theatre is not out any extra expense.

The real success of a drive-in theatre concession stand depends on three things: speed, courtesy, and quality merchandise. Since 75 per cent of the evening's business is done during the 15-minute intermission period, each of the three factors is of equal importance. Speed in making sales is dependent on the most efficient arrangement of dispensing equipment and on the right selection and proper training of employees. Courtesy in making sales and quality merchandise are essential for building repeat sales.

A cafeteria system may be used to speed up sales. Patrons are channeled down the counter where merchandise is grouped within reach so that they may help themselves. They thus can wait on themselves faster than attendants can, and they are inclined to buy more merchandise on the "spur of the moment". Another advantage of the system lies in the fact that only one person handles the money at the payoff end of the counter with fewer shortages resulting and little stealing. It is important, however, to keep the candy, chewing gum, and cigarettes near the cashier.

Weed Control in Drive-Ins

A Few General Tips on Methods and Equipment Used to Destroy Unsightly and Dangerous Plant Growths

By ALEXANDER M. COCHRAN
President, Fogging and Dusting Service, Inc., Montclair, N. J.

BRIEF: ***Weeds . . . the deadly enemy of every home gardener . . . are also the constant bugaboo of the drive-in operator . . . They serve as first-class breeding grounds for insects to annoy his patrons . . . ruin the appearance of his showplace . . . and are often injurious to the health of his staff and customers alike . . . Although the average operator has managed to control weeds in the ramp area, they continue to plague him in other sections of his theatre . . . around the playground area, picnic grounds, driveways, fences, woods, etc.***

Science has, however, discovered new ways and equipment by which these scourges may be successfully combatted . . . through the use of powerful new weed-killing chemicals and spraying apparatus . . . Different techniques work with varying effectiveness in separate parts of the country . . . but certain procedures are applicable almost anywhere.

The article presented below sums up the latest general control methods for the earnest consideration of operators beset with this problem . . . Outdoor theatremen should find contained in it much valuable advice . . . to aid them in controlling their vexatious weeds.

The weed, one of nature's most prolific offspring, is an obnoxious plant growth whose important extermination is given too little heed by many drive-in operators. Most outdoor theatremen manage to keep the weed problem on ramps under control by hard surfacing and other means, but few of them know how to conquer weeds in and around other sections of the theatre area. This discussion, therefore, will center around weed control outside the ramp area.

Reasons for Weed Control

Although there are an infinite number of reasons for weed control around drive-in theatres, three stand out as being particularly important to good operation. First of all, insects, particularly mosquitoes, can cause irreparable damage at the boxoffice, if they are permitted to get out of hand. Even if a particular theatre is so fortunate as to have no mosquito problem, tall grasses and weeds may well serve as haunts for other types of insects. They should, therefore, be eliminated as a natural aid to any other methods of insect control which the operator may employ.

Secondly, weeds certainly do not add to the overall beauty of a theatre area. It is important, therefore, to keep them under control, lest they spoil the appearance of the grounds. Although many operators cut their weeds regularly, the task of destroying them may be performed more simply and effectively by spraying or dusting.

Lastly, it is necessary that weeds be controlled from a health standpoint. A number of weeds, such as ragweed, poison ivy, and sumac, either annoy the respiratory system or irritate the skin. Patrons who suffer from contact with these obnoxious weeds will be lost customers if they are not controlled. In spite of the fact that the pollen of ragweed and its cousins may be carried 50 miles or more on the wind, it is possible to eliminate it in the immediate territory surrounding the theatre. By the same token, although children may be kept away from poison ivy and sumac by fencing, maintenance men can acquire a good dose unless these harmful skin irritants are destroyed.

Conscientious efforts on the part of theatremen to control weeds within their grounds will spur township and county agencies to extend their weed control activities. Similarly, intelligent publicity on the part of the theatre in regard to an industrious weed control program will win the appreciation of patrons, for they will feel that the management has their best interests at heart.

General Methods of Control

Each theatre has its own unique surroundings: open fields, woods, or swamps. In general, two kinds of weeds—a wood type and a leafy type—are found in each of these locations. The woody type of weed requires, as a rule, a more powerful chemical for control than the other kind. A product known as 2,4,5-T is excellent for this type, and the isopropyl ester of 2,4-D is effective on the leafy variety. Both of these products are produced by a number of manufacturers. They are herbicides in the sense that they stimulate the growth of the plants to such an extent that they die. Although some products on the market will sterilize the soil as well as kill the plants, such a practice is not generally recommended; some plant life, such as grass, is necessary to prevent erosion and keep dust down.

A drive-in operator confronted with a weed problem in an uncultivated field should first treat it with a good dose of 2,4,5-T or 2,4-D, as fits the case, and then turn the ground completely with a plow or Roto-Tiller. Grass seed with a good percentage of annual seeds, such as rye, should then be planted so that immediate growth will occur. After a strong stand of grass, which must be kept constantly cut, has been secured, any weeds that may try to come back will present no problem. Since a proper dosage of weed killer will not harm grass, a treat-

A NEAT ORDERLY EFFECT, gained through black-topped drives and well-kept white guard fences, can be destroyed by the growth of weeds and brambles in the fence rows. Here is an area difficult to trim or cut mechanically in the wide areas of a drive-in, so chemical sterilization is recommended.



ment a year, for two or three years, will suffice to keep weeds down.

Although wooded areas are more difficult to treat than open fields, it is probably more important to dispose of weeds in such places, for they retain more moisture and, consequently, offer good insect breeding grounds. In such cases, 2,4,5-T or a soil sterilizer may be employed to advantage. If the latter is used, however, caution should be the watchword around trees, as they may be damaged or destroyed by carelessness.

Since it is impractical to endeavor to retain grass in a heavily wooded area, it is advisable to leave the floor bare for at least 50 to 100 yards in all directions. In order to eliminate a possible fire hazard, it is also expedient to have the heaviest part of the debris left by the destroyed weeds cut and raked up immediately. The balance of the residue can be taken care of by a second cleanup, if not by nature's own decaying methods. The result should be a forest that is accessible, good-looking, and unattractive to insects.

Since many theatres are built in swamps, drainage is an important consideration. Inadequate drainage of standing water is a sure invitation to insect trouble, so a thorough and unrestricted drainage system is a necessity, larvicides offer only a temporary means of control. Weeds are often the cause of drainage restriction, so it is important to kill them completely. In addition, insects develop on such weeds under the water as well as above, so their elimination is multi-purposed. A chemical known as Chloroben (and others) will kill all aquatic weed growths and permit a good flow of water, if the terrain permits. Weeds surrounding water areas should also be checked.

The good drainage resulting from effective destruction of weeds will also serve to improve soil conditions in areas where nothing but swamp type vegetation previously grew. In all probability, various types of moss will creep over such treated areas. The operation is a costly one, but its benefits to the theatre are well worth the expense involved.

Spraying Methods and Equipment

During the past few years new demands have resulted in the development of improved spraying techniques for performing weed control jobs. One of the most important of these new methods is known as "low gallonage" spraying. Now, instead of pumping anywhere from one hundred to one thousand gallons of material per acre, as required by a former method involving the use of heavy tanks and trucks, the same job can be accomplished with only five gallons of finished product per acre. "Low gallonage" spraying equipment, however, produces a very fine mist spray which will drift with the wind, so care must be exercised in its application.

In some sections of the country, where water is difficult to obtain, dusts, which may be scattered by hand, can be used; care must also be exercised in their use, however, lest they drift onto and spoil desirable vegetation.

Boom sprays, used in agricultural work with swaths as great as 40 feet, are not usually practical for drive-in use because many theatres have neither the type of terrain which could be treated with such a unit, nor the acreage to warrant purchase of one. If such a method is feasible in a particular location, professional operators are generally available to do the job without the necessity of an investment on the part of a theatre in a unit.

Due to the trees, fence rows, and the general nature of terrain, the majority of theatre areas are not commonly accessible, so a small type of unit which a man can carry on his back should normally suffice. A little knapsack sprayer can be purchased for as little as ten dollars, and one man can go out with enough material on his back to treat an entire acre. Or, if he feels that such equipment is needed, the theatre operator can purchase many types of power rigs, both large and small, at relatively low cost; any reliable farm implements dealer or landscapers' supply house can advise him on a choice for his situation.

Finally, the time of application is important when 2,4-D formulations are used. The point at which growth appears to be most active is generally considered to be the most effective time for chemical treatment of weeds, and a faster kill usually results. The initial cost of these chemicals is high, but they are really quite cheap acrewise. It is important to follow the manufacturers' recommendations and never try to double the amount of material used to get a better kill; as likely as not, it may not kill at all, for the plant may be injured to such an extent that the chemical will be restricted to its place of application and sealed off from entrance into the plant's system.

EDITOR'S NOTE

This article complements the survey presented in the 1948-49 Edition of THEATRE CATALOG *entitled "Insect Control for Drive-In Theatres." In addition to the A. M. Cochran insect control service, described in detail in this previous edition, the Fogging and Dusting Service, Inc., also offers a weed control service within 100 miles of its location.*

GOOD POLICY when neighboring areas are owned or controlled, is to fill all marshy ground, and to plow or disc all ground that is supporting weeds and underbrush. Here at the Twin Drive-In, Cincinnati, Ohio, the unused areas will be planted with grass seed and will thereby contribute to both the appearance and insect control of the neighboring twin theatres where every consideration has been given to the comfort and service of patrons.



Surfacing of Ramps and Driveways

A General Outline of Procedures to be Followed in Providing Hard Surfaces to Carry Traffic Burdens

BRIEF: *No matter how tailor-made for drive-in operation a site may appear to be, the virgin soil will require strict attention . . . Mother Nature has never yet been known to supply a plot of ground for a drive-in . . . strong enough to support the onerous weight of hundreds of automobiles . . . without some type of reinforcement needed . . . Such strengthening materials, however, must be selected . . . and applied . . . with care . . . lest they be swallowed up in the earth's maw, taking car wheels with them.*

Before Nature's new "dress" is tried on, though, she must be allowed time to accustom herself to the new role she is to play . . . Her recently leveled and furrowed figure must settle comfortably into its new contours . . . until such time as all soft spots and depressions have evidenced themselves and been filled accordingly . . . Once the ground has assumed what appears to be a fairly permanent status quo, *the ramp and driveway areas are ready for surfacing.*

Although different methods and materials have been used in accomplishing this task in various locations, a few broad precepts . . . which may help to save owners from the tragic consequences and resultant costs of improper surfacing . . . have emerged as guides to a satisfactory solution of this problem . . . The following article discusses the techniques and ingredients which enter into a successful surfacing job . . . an achievement which will save tow ropes as well as purse strings.

Before undertaking the surfacing of a drive-in theatre, it is of paramount importance to remember that the raw earth of the original plot has settled for long centuries. Millions of rain storms, floods, snows, and frosts have packed and kneaded it into its original contours. Therefore, it is to be expected that, regardless of how well the ground is rolled and tamped, some settlement and soft spots will develop in the new grade for some months after the bulldozers, graders, and diggers have finished their work of grading the area into curved ramps and crisscrossing it with drainage and conduit ditches.

Wait for Soil Settlement

In view of this fact, the wise drive-in operator does well to wait a full season, or at least two or three months, before dressing or blacktopping either his ramp areas or driveways. In short, serviceable, dependable surfaces cannot be hurried, for hastily devised paved or gravel surfaces that look and feel perfectly solid may react very badly under the narrow wheels and weight of continued automobile traffic. With the exception of marshy areas, the sub-soil itself is the key, and it will not support any top surfacing, not even cement, until it has settled and adjusted itself to its new planes.

If sufficient care has been taken in the choice of materials and original construction, settlement soft spots should not show up in any one night in enough quantity to constitute a major headache. The theatre area should, of course, be checked every day for holes, which should be properly filled to promote a smooth, hard surface more rapidly. In this connection, the versatile jeep has been found to be an invaluable helpmate. Aside from its assistance during evening operating hours in carting supplies to the confection stand, transporting gas to patrons, and pulling cars out of holes which broad-wheeled steam rollers have missed, a jeep with a small truck body is helpful in taking men and materials out during the daytime to fill soft and low spots.

Gravels and Fills

When the proper time to surface has arrived, the choice of different grades of construction fills, such as gravels or slags, depends to a large extent on the location of the theatre and the resultant available materials; these, of course, vary in different sections of the country. In New Jersey, for example, the most logical material is a grade A gravel, which is abundant and relatively cheap, consisting of sand, clay, and stone. In

A WELL CONSTRUCTED RAMP AREA is much to be desired. Here at the Lincoln Drive-In, near Philadelphia, Penna., all settlement and pot holes were carefully worked over during the first year of operation, so that the surfacing is now permanent and requires a minimum of maintenance attention.





ABOVE: The natural levels and the soil formations which resulted from hundreds of years of rain, freezing, thawing and vegetation, are heavily scored and disrupted during the ramp construction operation. BELOW: Rolling and tamping will help to produce the desired levels, but however carefully done there is certain to be a later settlement and readjustment that will need spot attention.



Florida, by contrast, there is a crushed coral material which is ideal, inexpensive, and affords one of the best surfacing and base materials. In other areas, the by-products of quarries supply varying grades of gravel or stone chips which are "naturals" for this purpose. In the majority of cases, the cost of these materials is relatively low, and the price is determined primarily on the basis of the distance they must be hauled.

These foundation materials, however, should be selected wisely with durability in mind, as they rest on the raw earth and provide early drainage without great susceptibility to washouts. Furthermore, they provide a porous, binding surface for future paving materials.

Although a gravel surfacing, which has been laid up to six inches in depth, rolled and tamped over, provides an economical and serviceable topping, it has one unfortunate disadvantage. Since it harbors some of the more persistent weed pests, some complete sterilization or some continuous method of weed control is necessary. This requirement is particularly important in view of the fact that many of the weeds so nurtured are of the thorn and burr variety. Thus, aside from creating an untidy appearance, they are a constant source of discomfort to patrons who walk through the ramps in the dark on their way to concession stands or restrooms.

On the other hand, certain forms of slag, being of cinder origin, are not susceptible to weed growth. A waste product from the manufacture of steel and other smelted metals, slag is often available close to industrial areas and packs well to provide a firm road surface. Although slag is slightly more expensive than natural gravel, it possesses commendable features which make it a worthwhile surfacing material in certain sections of the country.

Blacktop and Oil Treatment

Particularly popular choices for surfacing driveways bearing the heaviest traffic loads, blacktop and oil treatment are composed of essentially the same bituminous substances. Blacktop is factory-mixed and is applied as a black paving mass. Oil treatment, as the name implies, is a liquid that is sprayed on the gravel or slag surface at the site and then covered with stone chips or sand.

Blacktop is made in both hot and cold-mix varieties. The former, however, is not particularly suitable for drive-in purposes due to two factors; it requires special baking equipment on the job, and has the disadvantage of cracking and buckling when not in use by much traffic, a characteristic which makes it more desirable for highway construction.

The cold-mix surface, on the other hand, requires only grading and rolling on the job, although it has approximately the same surface strength as the hot-mix variety. Furthermore, since it has greater flexibility during idle periods, it is more adaptable to drive-in construction.

Oil treatment contains in itself a naphtha agent which evaporates and leaves a tarry residue. The oil may be of the medium cure type, which evaporates slowly, penetrates deeply, and gives a good sub-surface seal. Rapid cure oil

evaporates readily and serves as a bonding agent for the sand or stone chips applied over it.

Blacktop surfaces are generally two inches thick, and cost approximately $1.25 to $1.50 per square yard. Oil-treated surfaces are usually one quarter of an inch thick, and, at 15 or so cents a gallon, cost about 50 cents a square yard applied. Since numerous layers of oil treatment can be applied, one over the other as needed, their depth and strength can eventually be brought up to a par with those of blacktopping, with the added advantage that any blemishes or cracks can be repaired with each new application.

Application of Surfacings

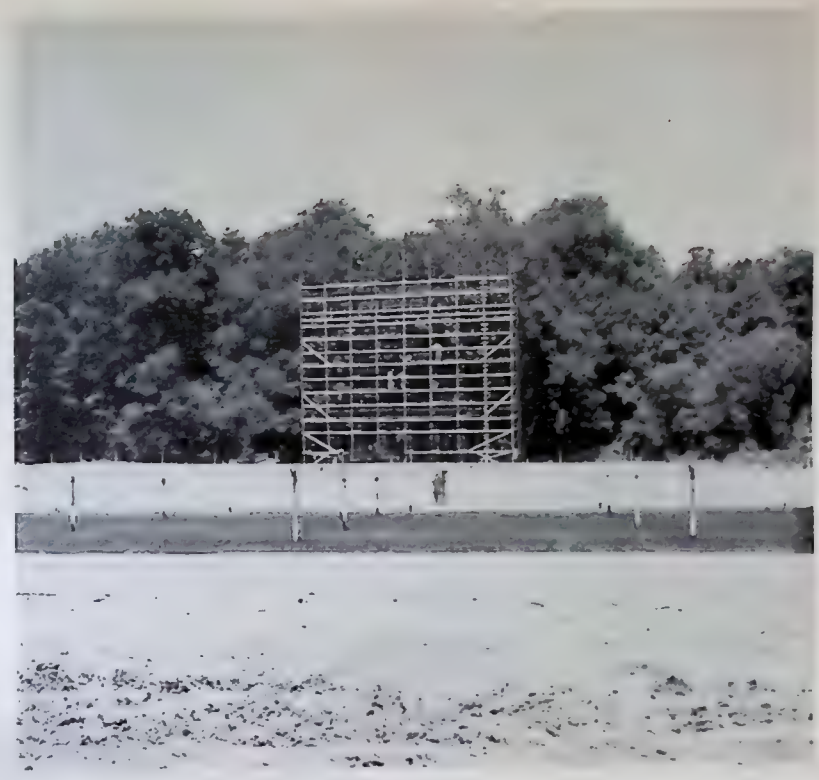
Since the average 700-car drive-in, to take a case in point, would encompass approximately 36,000 square yards, a complete blacktopping would be quite expensive. However, in view of the fact that the entrance and exit driveways carry the major part of the heavy traffic, it is advisable to apply a good two-inch layer on such surfaces.

Before blacktopping is begun, a check should be made to insure that the subsoil has been packed tightly, so that there is no further possibility of soft spots or low areas cropping up. In order to assure a smooth surface, a jeep with a drag line (usually a heavy wire screen with heavy weights attached) should be repeatedly run over the roughly finished driveway surfaces. This procedure saws off the tops of ground upcroppings and fills in depressions with displaced soil. All areas should be covered with three to six inches of gravel fill, crushed rock, or slag, well-packed and rolled down. The blacktop cold mix is then applied and rolled to produce the finished surface.

Oil-treated surfaces, however, are likely to prove more practical in ramp areas and other sections of the theatre which receive less traffic. After these places have been smoothed out by drag-chaining, a three-quarter-inch layer of filler is applied to provide traction, and the areas are opened to traffic. Once all soft spots and settled areas have been dug up, filled, and surfaced again with crushed rock as they materialize, an oil treatment may take place with sand or stone chips laid on top.

Unless ideal soil conditions exist, however, oil treatment should not start immediately for several reasons. First of all, if the soil beneath is the least bit porous, the oil will go right through the surface materials and be lost. Secondly, if the oil-gravel combine is not properly supported, it begins to crack, sink, and settle unevenly under the weight of the cars; the result is generally the forcing of a second expensive surfacing job in preference to continual patching of depressions and cracks. Furthermore, if such a contingency occurs, it may mean the sacrifice of the entire area containing the oil-gravel combine; this disastrous eventuality will necessitate special equipment to break up the treated surface into small pieces at added cost.

A good solid surfacing will prove to be well worth the pains required to lay it. A poor one will sag under the weight of cars, buckle under weather stress, and give operators headaches.



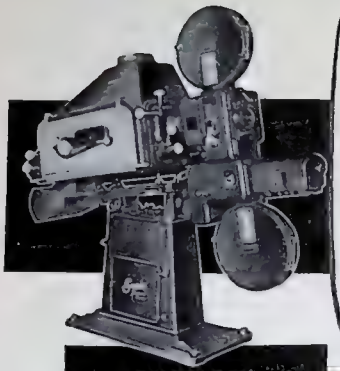
OIL TREATMENT is the answer for an early dressing, over gravel or whatever other surfacing materials have been used. Above, the first oil treatment will be bound into a dust free cap. Below, the oil treated surface has been re-rolled. Later applications will not sink in so deeply and will need to be top dressed with loose gravel, crushed stone, slag or marl, as available.



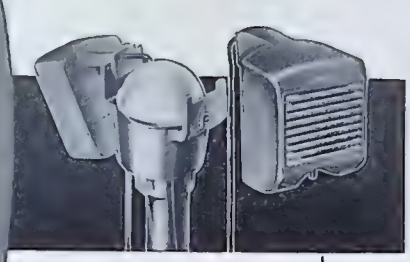
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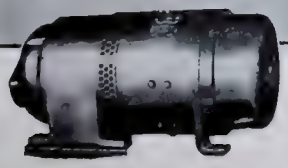
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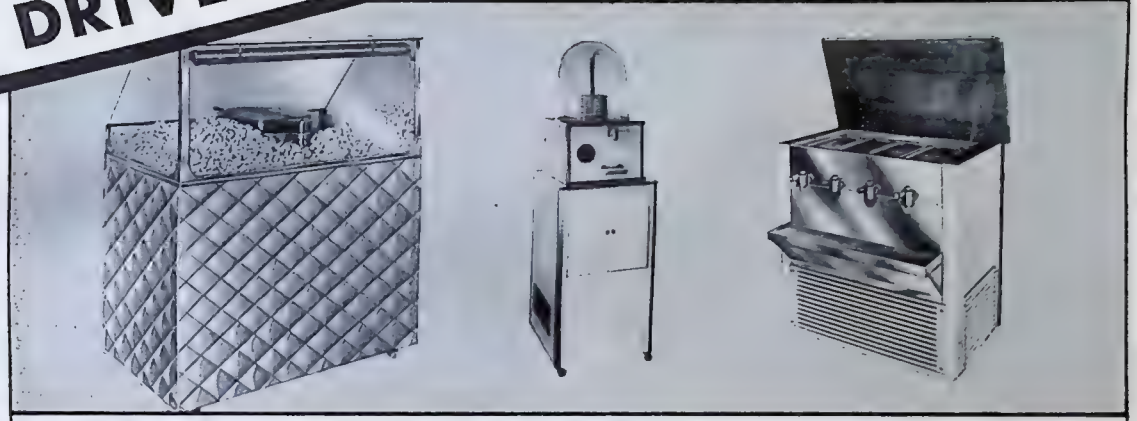
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ENTRANCE and EXIT SIGNS

PORTHOLE BLOWERS

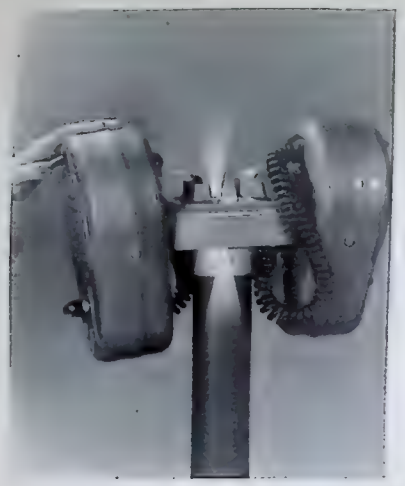


RAMP CONTROL SIGN



THEATRE SUPPLY

— FOR EVERY THEATRE NEED"



THE AUTOCRAT CHAMPION

"Voice of the Car"

THE OUTSTANDING SPEAKER BUY FOR YOU

TOPS IN QUALITY LOWEST IN PRICE

Your Choice of Two Models

CAST ALUMINUM

- Precision die-cast aluminum speakers in natural aluminum.
- Recessed control knob.
- Powerful, weatherproof, moulded speaker cones.
- Precision die-cast aluminum junction boxes in natural aluminum.
- Only 1st quality nationally known parts used.

PRESSED STEEL

- Heavy pressed-steel speaker cases with baked on auto finish.
- Cast-aluminum junction box in natural aluminum.
- Powerful one-piece moulded, weatherproof speaker cones.
- All standard brand top quality parts used.

PRESSED STEEL MODEL AT $12.45 PER SET

CAST ALUMINUM MODEL AT $14.95 PER SET

(Includes Two Speakers and One Junction Box)

ACCESSORIES: Either Model

Post Down Guide Lights mounted in Junction Box	$1.55 per set
Special Cradle Type Basket Mountings on Junction Box (Cast aluminum model only)	1.50 per set
Koiled Kords on Speakers ($1.25)	2.50 per set
Concession Signal System (The Light That SELLS)	5.95 per set

Any other attachments, can be furnished on special order at a small additional cost.

GUARANTEE

Every Cast Aluminum Autocrat speaker carries a full one-year unconditional guarantee. Autocrat speakers have been designed for the benefit of your patron, and are built to satisfy you, the theatre owner. Pressed Steel type....120 day guarantee.

See your *Century* dealer or write

AUTOCRAT, INC.

Manufacturers of Theatre Equipment
2227 HEPBURN AVE., DAYTON 6, OHIO

Be Thrifty in Fifty WITH BALLANTYNE



EVERYTHING IN Sound and Projection Equipment for the Theatre

Quality High - Cost Low

Every need of the theatre industry is made available through the Ballantyne Company . . . *at prices within the reach of everyone!* Complete catalogs on Ballantyne equipment, or folders on individual units are available on request. Before you buy any equipment, see and compare Ballantyne.



Recognized Leadership In Indoor Theatre Equipment

For more than two decades Ballantyne Royal Soundmaster equipment has been serving the theatres of the world with the finest in sound projection. Superb quality equipment at low prices has brought the Ballantyne Company to its present dominant place in the manufacturing field. Before you equip a new theatre, or replace obsolete units in your present theatre send for our complete catalog of sound and projection equipment.

"Turn-Key" Drive-In Theatre—We Build It For You

The Ballantyne "Turn-Key" drive-in theatre is the original "packaged" drive-in plan. For a contract price, you can have your drive-in theatre built . . . from the ground up . . . and completely Ballantyne equipped with none of the work and worry yourself. "Turn-Key" drive-ins are going up all over the country. Write for our "Turn-Key" catalog and see for yourself how you can save $10,000 to $20,000 with this amazing plan.

Drive-In Equipment....."Packaged" For Any Size Theatre

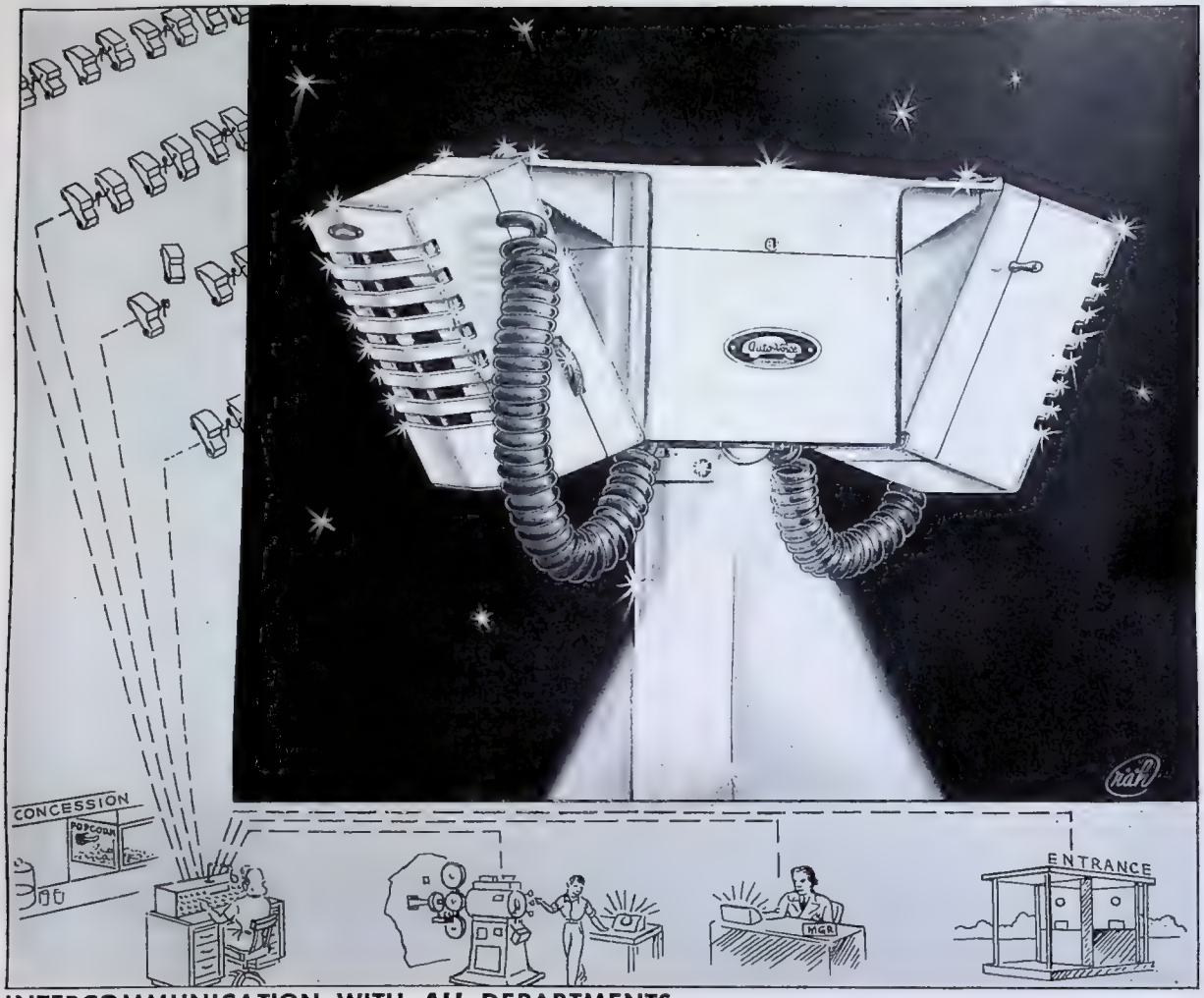
For convenience in buying, and to assure you of securing equipment that is unit matched for perfect performance, Ballantyne offers "packaged" drive-in theatre equipment "package priced" as low as $7,188. Everything you need . . . In-a-car speakers, complete amplification system, and complete projection booth equipment including all accessories . . . in any combination to fit your needs. "Packaged" drive-in equipment catalog available on request.

In addition to Ballantyne's already complete line of sound and projection equipment, several new units are now available including: the new 85-95 ampere Water-cooled Hydro-Arc Projection Lamp; the new Model "BW" Projector; and the new MX-40 series In-A-Car Speakers . . . the lowest priced speakers on the market.

THE BALLANTYNE CO.
1707-11 DAVENPORT STREET
OMAHA 2, NEBRASKA, U.S.A

Ballantyne equipment sold only through authorized Ballantyne dealers. See your nearest dealer or write direct for catalogs and prices.

Auto-Voice 1950 ACOUSTI-MATIC in-car SPEAKERS...



INTERCOMMUNICATION WITH *ALL* DEPARTMENTS

Auto-Voice 1950 ACOUSTI-MATIC

SPECIFICATIONS

Mirror-bright Polished Corrosive Resistant Aluminum Alloy Castings

Lifetime Usage

One Year Guarantee

Obtainable with or without Talk-back

Aluminum Voice-Coil for perfect outdoor reception

Your Theatre name imprinted on each speaker cabinet

500 Watt Heaters

Ramp Beacon Lamps available

Here's the new, gleaming, mirror-bright in-car speaker you've been asking for—it's like a jewel set in a pool of stars. Make it easy to order refreshments with Auto-Voice Talk-Back system with the patented simple one wire layout. Increases concession sales beyond expectations.

This flexible system permits intercommunication of ALL operating departments with each other by a flick of a key. Operate YOUR Drive-In like a modern business.

Your inquiry will receive prompt attention and complete information will be furnished you.

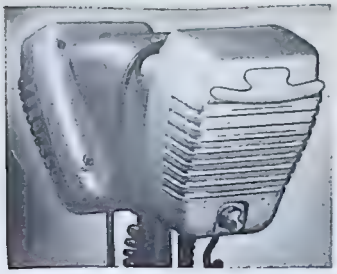
APPROXIMATELY 10% OF DRIVE-IN THEATRES IN THE U. S. A. ARE EQUIPPED WITH AUTO-VOICE

DRIVE-IN THEATRE EQUIPMENT CO., INC. Auto-Voice CLEVELAND, OHIO

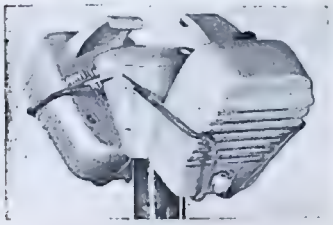
DRIVE-IN THEATRE EQUIPMENT CO., Inc.

2110 SUPERIOR AVE. • CLEVELAND 14, OHIO

America's Finest DRIVE-IN THEATRE EQUIPMENT of PROVEN WORLD-WIDE ACCEPTANCE



With handle (as shown) at slight extra cost



DIT-MCO In-Car SPEAKERS

The SENIOR: Most advanced electronic and mechanical design. The only speaker made using "L" pad volume control, especially manufactured for the line transformer in this set. The only transformer with 10 taps to match any line impedance needed, plus secondary windings so the other speaker is not affected should one fail. Guaranteed waterproof.

The JUNIOR: For the small drive-in theatre desiring a less expensive speaker. Unexcelled at similar price. No sacrifice in quality or fidelity of tone. Housing, workmanship and materials all comparable to "Senior."

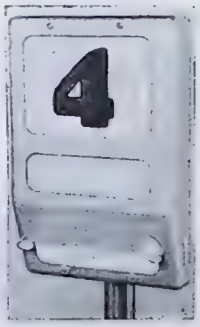
All Models Fit 1½" or 2" Pipe



STANDEE: For coverage of your playground and walk-in patrons' seating, for rear ramps, for trucks and for over-flow crowds. Cast aluminum housing, 6" x 9", waterproof speaker, withstands weather and abuse. Brass-Shaft wire wound "L" pad volume control. Can be pre-set to any desired volume, tamper-proof. The ideal speaker for the purpose.

COMBINATION RAMP IDENTIFICATION and DRIVEWAY FLOODLIGHT

Answers your ramp lighting problems! Double-strength glass panels in heavy cast aluminum case. Ramp numbers and "FULL" letters are fused on glass in ceramic enamel; won't fade or peel. Lower section contains floodlight, spreading a beam groundward to light ramp entrance avoiding confusion and accidents.





← Combination ENTRANCE LIGHT & ENTRANCE DRIVEWAY FLOODLIGHT (Also Exit and Driveway Floodlight)

40" Single or Double; 20" Single Face



Eliminates risk and "bottle-necks" at important entrance and exit areas. Bright wording and arrows point the way, floodlight directs a beam groundward. An asset to you, a service to patrons. Rust-proof; baked Hammerloid enamel finish.

← CENTER AISLE Ramp Identification Lights make it easier for patrons to get to and from concession stand. Also offered with "EXIT," "ENTRANCE," "MEN" and "LADIES" panels. Can be used as fixture without post. Also blank panel to light entrance and exit driveways.



DIT-MCO Pre-Fabricated Steel SCREEN TOWERS

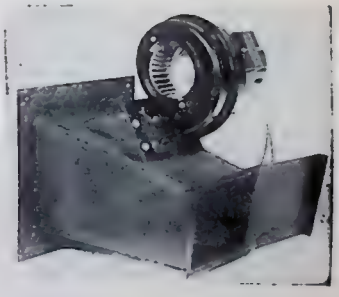
Four Types: Girder, Truss, Beam and Rigid Frame

The Rigid Frame Type provides housing facilities in the base which can be used for offices, storage, living quarters or concessions. All DIT-MCO towers designed and built in strict conformance to American Institute of Steel Construction specifications, will resist winds of 30 lb. per sq. ft., equal to a 90 mph gale. Get prices and particulars on DIT-MCO towers before you buy — for maximum beauty, strength, permanence and utility!

Patented Rust-Proofed Pre-Fab Steel SCREEN FACING

Bolts together and bolts to screen tower frame. Big savings in time and labor . . . and maintenance! Specially treated to grip paint. Permanent freedom from cracks, open seams, warpage, dark areas and moisture streaks.

DIT-MCO Projector Lens Protector PORTHOLE BLOWER



Keeps dust, rain and insects from entering projection port. Assures clean, flawless projection. Eliminates need for optical glass in port hole openings. Blower also acts as an auxiliary exhaust. This much-needed booth accessory is of value in indoor theatres as well as drive-ins.

OTHER *DIT-MCO* PRODUCTS

DIT-MCO Snow White SCREEN COATING: Flat, glareless intense white that lasts! The ideal screen coating proven successful in all climates.

DIT-MCO Black SCREEN MASKING: Similar high quality black for borders Absorbs light, endures, protects.

NEO-SEAL TRANSPOSED BURIAL CABLE: Available from stock, sizes 13-2, 12-2, 10-2, 14-1 and 12-1.

KOILED KORDS (or STRAIGHT) REPLACEMENT SETS: For any standard speaker. Stripped, tinned and spade tips on one end.

STEEL SPEAKER POSTS: Any size promptly shipped.

POST LIGHT TRANSFORMERS: Immediately available.

REPLACEMENTS: Speakers, junction boxes, transformers for any job.

SPEAKER RE-CONEING SERVICE: Get our low prices on this fast service.

"EVERYTHING FOR THE DRIVE-IN"

DRIVE-IN THEATRE MFG. CO., Inc.

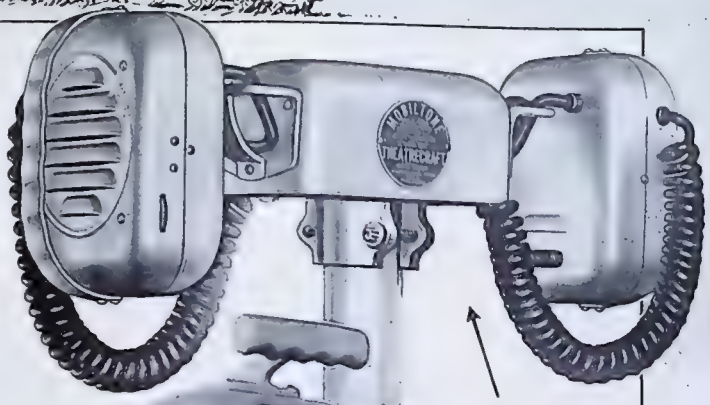
729 Baltimore Ave. Kansas City 6, Mo.



PIONEERS
in the DRIVE-IN FIELD

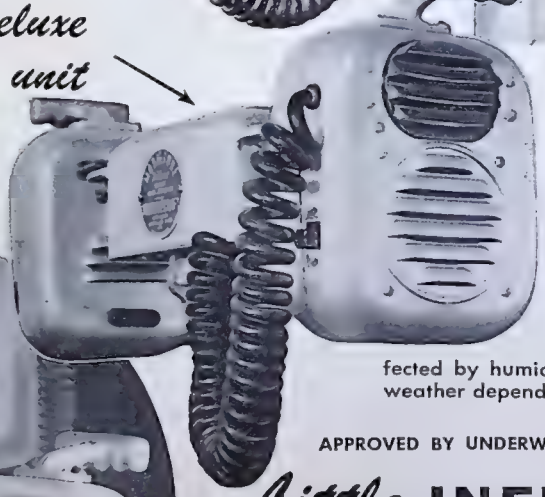
From the very beginning, Theatrecraft has shown the way,—presenting one after the other—these three outstanding units. Theatrecraft is mighty proud of having thus contributed to the advancement of Drive-In operation.

Long-sought needs of the Drive-In Exhibitor have been filled through the diligent research of Theatrecraft's engineering staff. The results have been enthusiastically received in the field, gratifying us for efforts expended.



MOBILTONE *deluxe* HEATER-SPEAKER *unit*

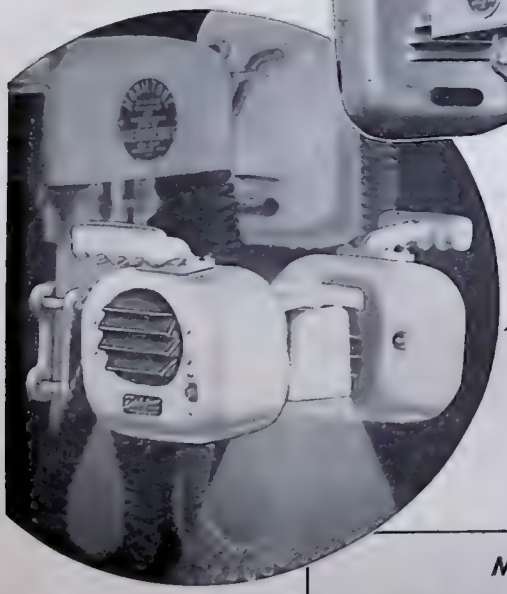
The one and only combination unit on the market. Has all the features of the standard speaker unit plus an in-car heater.



MOBILTONE *standard* SPEAKER *unit*

Equipped with G. E. 5¼" Alnico "5" aluminum voice coil speakers which are moisture-proof and are entirely unaffected by humidity. This insures all-weather dependability.

APPROVED BY UNDERWRITERS' LABORATORIES



Little INFERNO *individual* HEATER *unit*

This individual heater unit can be used in conjunction with any type of in-car speaker and can be installed in a matter of minutes after a simple underground wiring is completed. Each unit is individually fused.

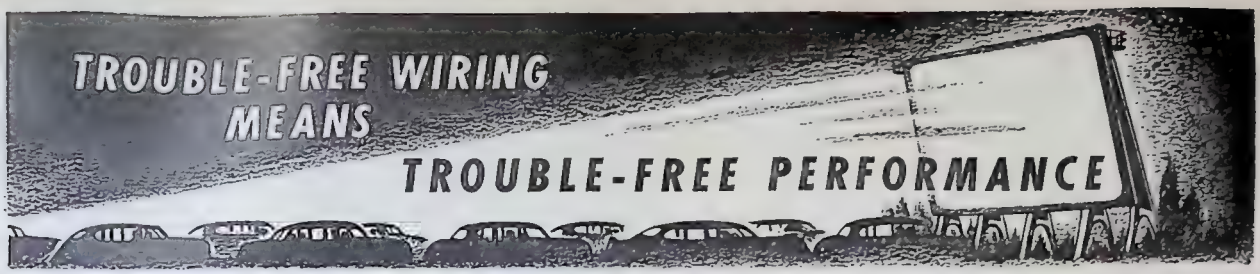
Write For Further Particulars!

Patents Pending

Manufactured and Fully Guaranteed by

THEATRECRAFT MANUFACTURING *Corporation*

1878 EAST 18th STREET • CLEVELAND 14, OHIO



WHITNEY BLAKE TELESEAL DIRECT BURIAL UNDERGROUND WIRE

Not only is TELESEAL the most efficient low-cost cable for underground use, but it costs less to install, because you can bury TELESEAL directly in the ground, even in damp locations, without conduits or other protection. TELESEAL is made like a miniature submarine cable with a tough, long-wearing neoprene jacket for extra protection. TELESEAL also is provided with lasting adhesion of the inside rubber insulation to the conductor by means of Teleplate,* a Whitney Blake exclusive process.

TELESEAL FOR ECONOMICAL, EFFECTIVE, LOW-COST UNDERGROUND SOUND TRANSMISSION

For further information, see your theatre supply house or your local Graybar warehouse.
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THE WHITNEY BLAKE CO.
NEW HAVEN 14, CONN.



KOILED KORDS FOR ALL IN-CAR SPEAKERS AND IN-CAR HEATERS

STANDARD KOILED KORDS

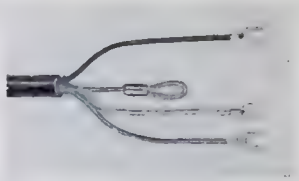
A neat 16 inch koil when not in use extends easily to 8 feet . . . and then always retracts to its original length when returned to the post. No hanging loops that catch on car projections and break, fewer speaker losses, lower repair and maintenance costs. Furnished with 2 and 3 conductors.





SAFETY KORDS • KOILED OR STRAIGHT

Sturdy, stranded steel cable jacketed with neoprene and including necessary conductors, reduces speaker losses. Cable will withstand approximately 400-pound pull and cannot be cut except with heavy tools. Available either koiled or straight.



DYNAPRENE-JACKETED STRAIGHT KORDS

THE FINEST KORDS ARE JACKETED WITH DYNAPRENE, a special jacketing compound developed by the makers of Koiled Kords. DYNAPRENE is an exceptionally tough, unusually long-wearing jacket that is not affected by sun or any kind of weather. Moisture cannot penetrate DYNAPRENE, grease and oil have no harmful effects.

DYNAPRENE-jacketed straight kords for in-car speakers and in-car heaters are the finest money can buy . . . a premium kord at low cost.

STANDARD STRAIGHT KORDS

Standard rubber-jacketed straight kords are available for all standard speakers.

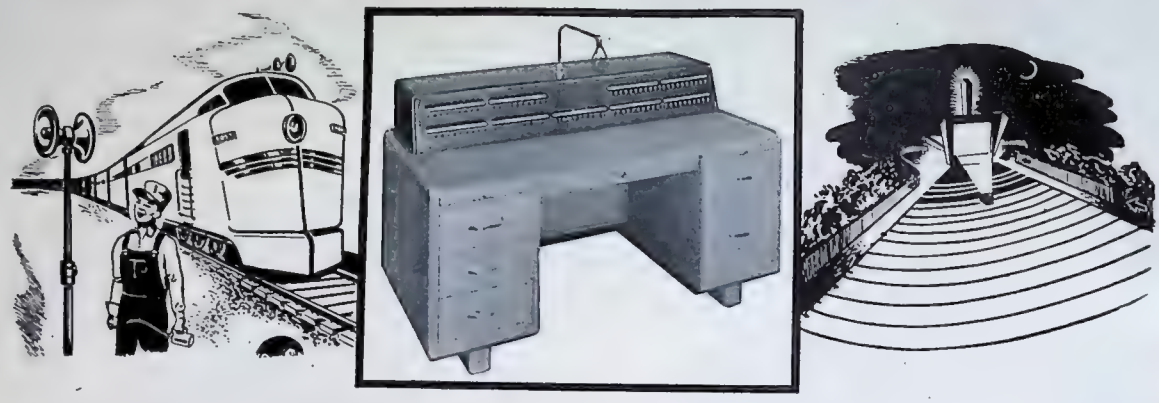
All the above kords for in-car speakers and in-car heaters are available as replacement kords fitted with terminals for each standard-make speaker. Keep a stock on hand and keep all your speakers and heaters working all the time.

Available through theatre supply dealers or The Graybar Electric Co.

Koiled Kords INCORPORATED

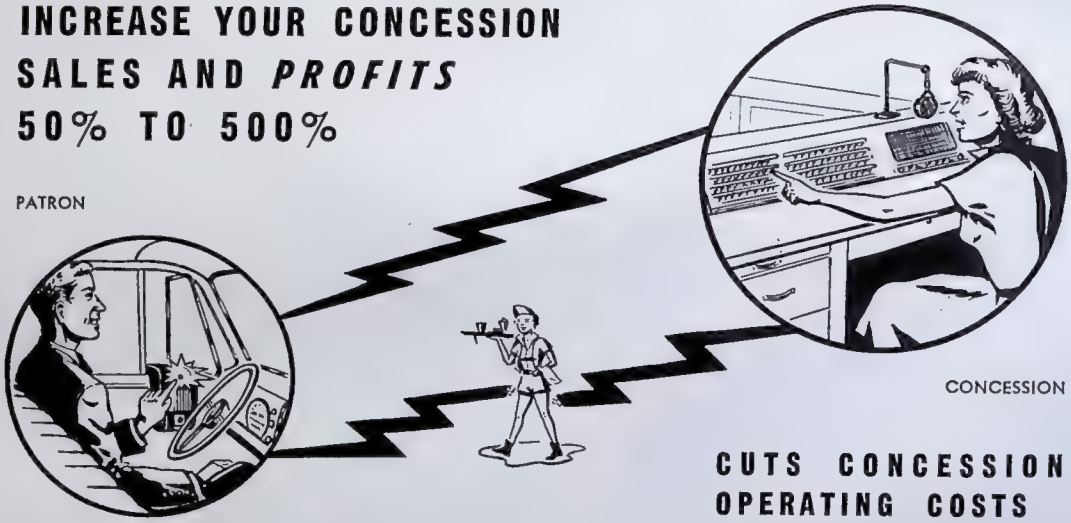
BOX K, HAMDEN, CONNECTICUT

RAILROADS *and* DRIVE-INS



TWO-WAY COMMUNICATIONS engineered to exacting specifications for the nation's railroads and now available for DRIVE-IN THEATRES.

INCREASE YOUR CONCESSION SALES AND *PROFITS* 50% TO 500%



CUTS CONCESSION OPERATING COSTS

- SIMPLE TO USE—CONVENIENT TO PATRONS—eliminates push-carts, roving order takers and waiting crowds at concession stands.
- SYSTEM CONTROLLED BY OPERATOR—individual two-way communication to each car.
- NO CONFUSION—patron momentarily presses button on car speaker without interruption to movie sound. Indicating lamp on operator's control panel at concession stand identifies car and remains "ON" until answered. When call is answered movie sound only interrupted 8 to 10 seconds while order is taken.
- THE R. W. NEILL COMPANY TALK-BACK SYSTEM brings your concession right into each car—gives prompt customer service during the entire show.

Your present movie sound equipment and car speakers may be used in conjunction with this communicating equipment.

INQUIRE THROUGH YOUR LOCAL THEATRE SUPPLY DEALER OR WRITE DIRECT

R. W. NEILL CO.

1811 CARROLL AVENUE
CHICAGO 12, ILLINOIS



FOR DRIVE-INS *it's* ASHCRAFT

SUPER HIGH

IT HAS NOW BEEN PROVED

THE ASHCRAFT SUPER HIGH
OPERATING AT ONLY 100 AMPERES
EQUALS OR EXCELS
CONDENSER TYPE HIGH-INTENSITY
LAMPS USING 185-190 AMPERES

EXCLUSIVE

THE ONLY PROJECTION LAMP
WITH BUILT-IN WATER COOLED
ROTATING CARBON and CONTACT JAWS

•

LARGE DIAMETER HIGH
SPEED REFLECTOR

•

LARGEST LAMPHOUSE

•

FULL BALL and ROLLER BEARINGS

•

SIMPLE—STURDY

•

PROVEN BY CONTINUOUS USE
IN LARGEST DRIVE-INS

•

THE STANDARD OF COMPARISON

Distributed by:
INDEPENDENT THEATER SUPPLY DEALERS
CANADA: DOMINION SOUND EQUIPMENTS, LTD.
FOREIGN: WESTREX CORP.

Approved and listed by Underwriters' Laboratory
Write for latest data on this lamp

C. S. ASHCRAFT MANUFACTURING COMPANY

36-32 Thirty-Eighth Street — Long Island City 1, N. Y.



FROM PICKING THE SITE TO OPENING NIGHT...

You can save time and money in planning your Drive-In Theatre by utilizing the broad experience of this organization. It is headed by men who pioneered in developing America's first Drive-In and who have engineered over 350 theatres.

You will find these services can reduce your original investment and produce a more profitable operation. For example, our grading plans, requiring a minimum of earth moving, can reduce your investment substantially.

WE ARE EQUIPPED TO ASSIST IN ANY OR ALL OF THESE FUNCTIONS:

- ★ site selection
- ★ preliminary plans
- ★ design research—buildings, drainage, traffic control
- ★ choice of equipment
- ★ construction supervision
- ★ operations planning
- ★ concession arrangements
- ★ training personnel
- ★ advance publicity
- ★ sale or purchase of locations and theatres

Preliminary and confidential inquiries are invited concerning any phase of our complete drive-in theatre services. No obligation.

DRIVE-IN THEATRE SERVICE CO.

W. W. SMITH V. C. SMITH

840 Cooper Street, Camden, N. J.

associated with

TAYLOR ENGINEERING ASSOCIATES

S. HERBERT TAYLOR, *Professional Engineer*

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FRONT *and* LOBBY

1949-50

Vitalizing Marquees with Trailers

Poblocki Inner-Service Marquee Adapted to Present Scenes of Current Shows on Attraction Board Face

BRIEF: *Although it is true that other media . . . such as newspaper ads and trailers . . . play an important role in luring the patron to the theatre, the marquee remains the supreme magnet of them all . . . Its sign letters and lights . . . by night and by day . . . are the true banners which beckon the moviegoer.*

As a radical new development in the functional plan of marquees . . . considerable attention was given to a complete description and analysis of the Poblocki Inner-Serviced Marquee . . . in the last (1948-49) edition of THEATRE CATALOG *. . . A further expansion of its use merits the following addition.*

Not content with the well-deserved laurels acquired from development of the inner-service marquee, the manufacturer has gone a step further . . . By means of a movable projector cabinet . . . also contained within the marquee . . . it is now possible to show stills from the feature on the face of the attraction board . . . The process is simple, but the advertising potentialities are great . . . The marquee takes on new life . . . and dual appeal . . . with both sign letters and trailers exploiting the show . . . The eye of the passerby is bound to be hit by the new double-barreled force of the marquee . . . and chances are that he will stop to buy a ticket.

One of the most significant articles to be featured in the pages of the Seventh (1949-50) Annual Edition of THEATRE CATALOG was that on a new patented inner-service marquee, designed and manufactured by Poblocki and Sons. This revolutionary new type of marquee met with great industry interest at the time of its introduction, and since then a number of highly successful installations have been made.

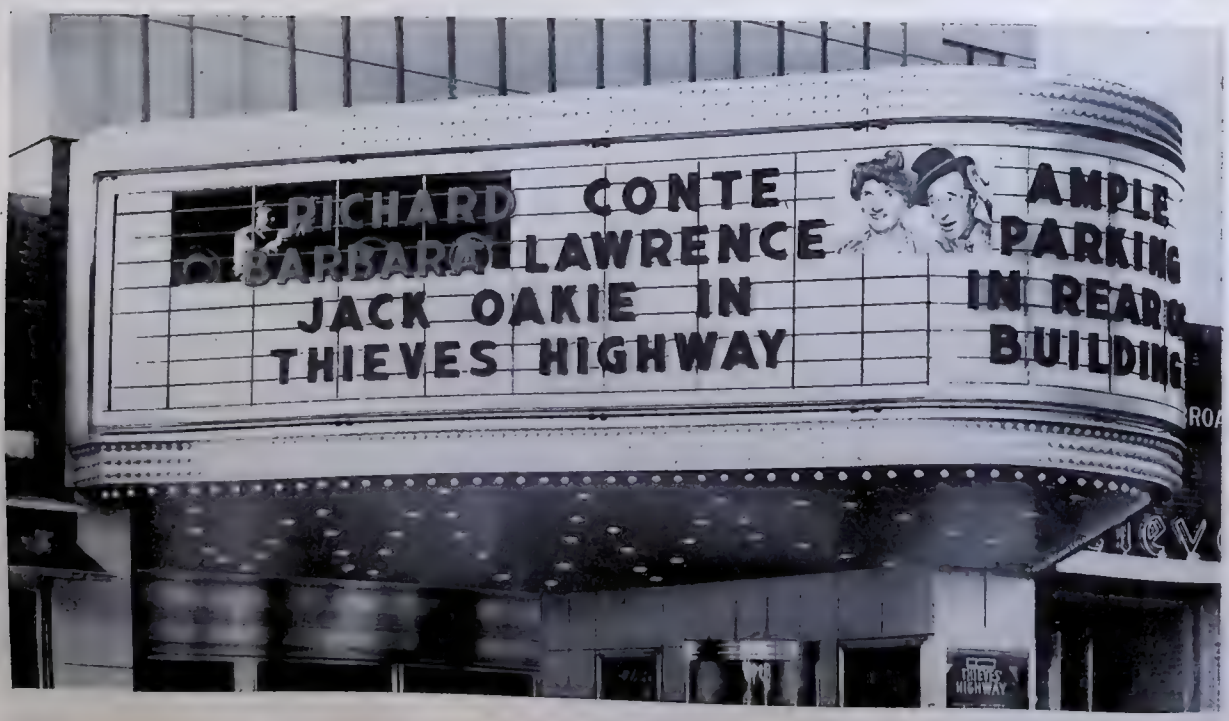
Although a complete discussion on the inner-service marquee may be found on pages 290-293 of the 1948-49 Edition, it is worthwhile to summarize briefly its principal features before proceeding to an analysis of a new use to which it may be put.

The Poblocki inner-service marquee was originally developed to overcome certain difficulties which former marquee designs presented. First of all, due to the fact that the conventional marquee requires that an employee stand up on a ladder in all kinds of weather to make changes on an outside attraction board, the changing of letters is a slow process and hazardous both to the employee and any traffic passing below. Secondly, the use of many small lamps on the regular marquee is costly not only in electrical current but also in lamp replacement. Finally, since changeable letters, lamps, and cleaning materials must be stored at some distance from the marquee, valuable time is lost whenever a new show is to be announced or the letters are in need of cleaning.

In order to overcome these stumbling blocks to good and efficient maintenance, Poblocki and Sons gave reality to the oft-discussed idea of converting the marquee into a room, to which access may be gained through a door installed in the front of the theatre wall, a scuttle hole in the roof of the marquee, or a door in the marquee soffit.

The problem of sign servicing from inside the room was solved by splitting attraction boards up into window type panels. These sliding panels allow letter changing from the inside as well as bulb replacement in the flasher signs. At the same time, operating costs are reduced by the use of 200-watt lamps in Holophane reflectors to direct a maximum of light through the sign board. Since all work is performed from inside the marquee, maintenance time is cut down appreciably, both sign letters and personnel are protected from the weather, and the hazards inherent in changing letters

THE MARQUEE SLIDE can be projected in any location on the theatre marquee where it will be most effective. After the area is established it would be possible to arrange a clear opening without bars.



from the sidewalk are obviated. Another feature is the possibility of installing a color changer in the marquee to enable the operator to change the overall color of the attraction board. A motor driven color wheel transmits various colors through the sign to produce an animated effect that adds great attraction value.

A TRAILER ON THE MARQUEE

At the time the Poblocki inner-service marquee was introduced, attention was drawn to the fact that a certain type of stereoptican machine could be used to project pictures of actors or trailers of current or coming attractions in stationary or moving form on one section of the attraction board.

Recently, however, Poblocki and Sons gave further scope to this basic idea by adapting the inner-service marquee so that effective advertising trailers may be shown through the use of a regular cabinet projector. This projector is a complete, totally enclosed unit in an all-metal cabinet, and includes the projector, mirror, and screen. The light from within the canopy cannot diffuse or overcome the light from the projector, which is fully automatic and needs only to be plugged into a 110 volt A. C. outlet.

Operation

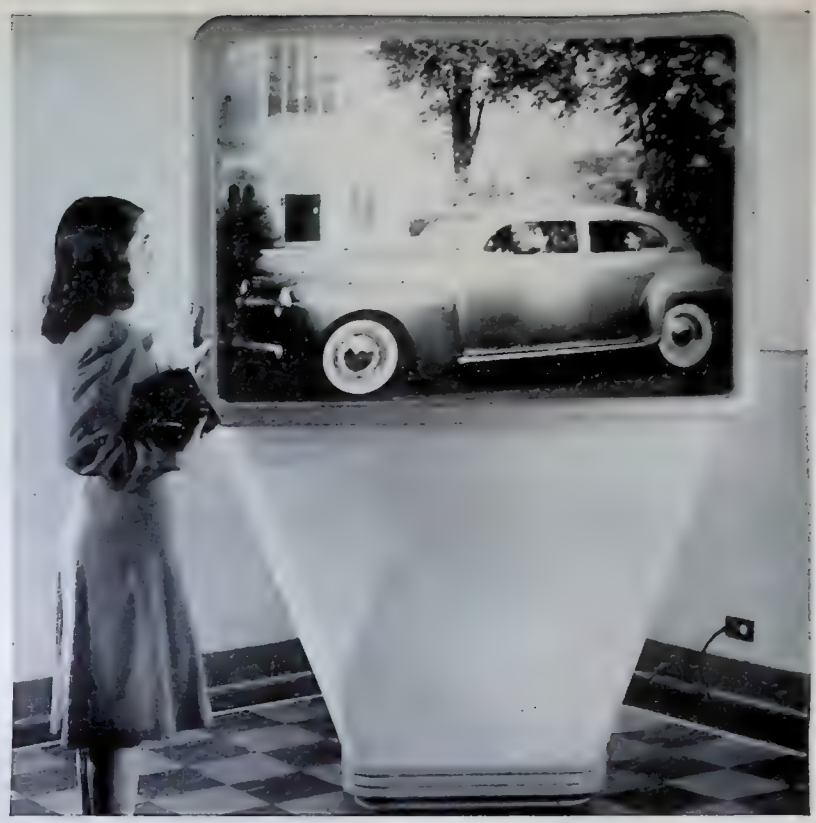
The rear-screen type projector may be used in either one of two ways. It can be used to project directly onto the standard white opaque plastic which is furnished as part of the attraction board, and this will become a screen; or the white opaque plastic can be removed from the free part of the attraction board, and a section of clear plastic installed and the screen of the projector cabinet may be used. The white cabinet can be made either with or without a screen.

Reels on the projector may be easily changed by opening the access door in the projector cabinet, taking out the thumb nut, and then removing the old and sliding in the new reel. It is also possible to leave the reel in place, remove the old one, and insert the new slides in the old reel. The projector lamp, which is obtainable locally, is air-cooled with a fan for maximum efficiency, and up to 1,000 watts can be used. The Solarbrite projector itself comes equipped with two preset plate glass mirrors. The entire projector can be removed from the case for easy servicing.

When the projector, which can be used at any time except when the sun's rays directly hit the attraction board, is not in operation, it can easily be pushed back, and the Holophane reflectors with incandescent lamps, as well as the plastic and letter frames, may be replaced in the marquee in short order.

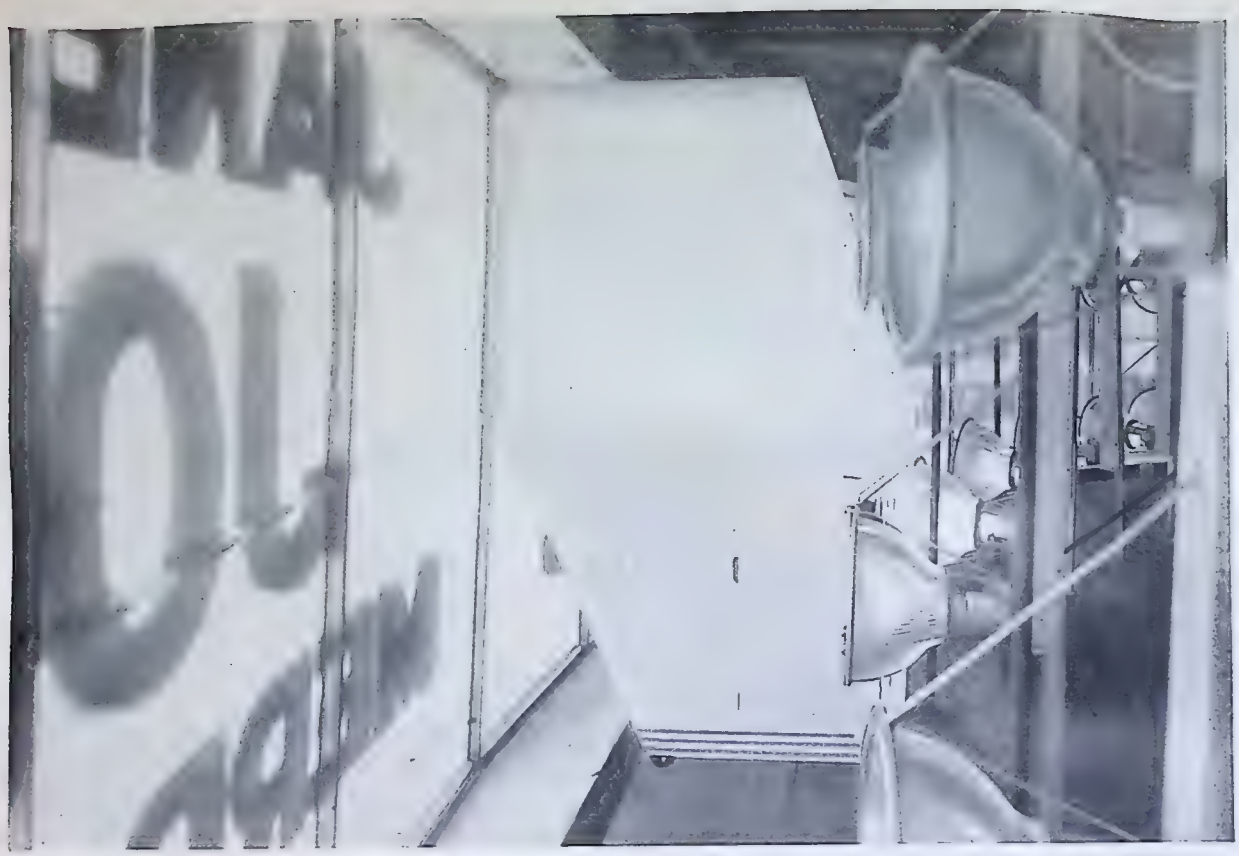
Advertising Value

Since the projector shows 16 scenes continuously on the marquee, it attracts the immediate attention of prospective patrons passing by the theatre. Experiments have proven that a close-up or head view of one or two actors, on either color or black and white film, may even be seen from as far as a block away. Pictures containing too many people or a background of scenery or people have been found to be less desirable because



THE PROJECTION UNIT contains its own translucent rear-projection screen and is completely automatic. In use it can be moved out of the way until the sign letters are in place and an opening is available.





IN POSITION the slide projector is a unit in itself that does not relate to the holoplane or other marquee lighting. Its shadow box protects it from surrounding light spillage and the projection mechanism is housed in its base with an access door for servicing or the changing of slide holding units. As an additional feature of the Poblocki Inner-Service Marquee, some idea of the space, for slide projectors or letter storage, that is available in such marquees can be gained from the below view. Contrasted to the front view of this same marquee it will be found that these features do not detract in any way from its modern effectiveness while increasing its use efficiency.

the clearness and visibility of the picture are thereby cut down when looking at them from any distance.

Each individual frame remains on the screen six seconds, but this period can be increased to 12 seconds if desired. In any event, views of actual scenes from the show exercise a far more magnetic attraction on passersby than outside posters or advertisements. The type of weather prevailing makes no difference whatsoever in the effectiveness of the trailer showings because the screen is entirely protected from the elements, as is the entire unit. This factor is a godsend to maintenance men as well, for they can change slides in the projector without ever being disturbed by rain, sleet, snow, wind, etc.



CONCLUSION

Since the adaptability of the inner-service marquee to trailer showings is such a recent innovation, no actual theatre installations have as yet been made. However, every phase of the idea has been worked out in detail, and exhaustive experiments have proven it to be entirely workable in every respect. The projector, which can be removed from the cabinet for showing slides on lobby walls as well as on the face of the attraction board, has been thoroughly tested from a performance point of view and has come through with flying colors on every count.

This provision for trailer showings should add even more to the rapidly growing popularity of the inner-service marquee because it enables the theatre operator to complement the drawing power of his marquee with actual, beckoning scenes from the show that is transpiring on the screen inside. All the attention-compelling powers of light and motion combined in a realistic trailer on the marquee should certainly combine to draw passing crowds to the boxoffice window!

WAGNER SIGN SERVICE, INC.

THE WORLD'S LARGEST LINE OF MARQUEE DISPLAY EQUIPMENT

Designed for Powerful Attention Value and Effective Selling

Your front and marquee are worth a lot of money to you if used properly. Cash in on them!

Focus interest upon your theatre . . . compel attention to your offerings . . . outsell your competition . . . build your grosses by billing every attraction as a big event. Compare all changeable copy display equipment and you'll be satisfied with nothing but Wagner—the line with the most advantages—exclusive advantages.

If you want to put these forces to work for you and don't know how or where to begin, we will be glad to extend to you our complete planning service. Forward a photograph or rough layout of your front, and marquee, if you have one, and we will offer our recommendations, without obligation.

- GIANT WINDOW-TYPE FRAMES
- MASTER MULTIPLE FRAMES
- COLORED TRANSLUCENT PLASTIC LETTERS IN 5 SIZES
- ALUMINUM SILHOUETTE COVE LETTERS IN 8 SIZES
- COLOR-LITE PLASTIC LETTERS
- LUMINOUS COLOR-LITE LETTERS
- TRANSPARENCY FRAMES FOR COLORED PHOTOGRAPHIC TRANSPARENCIES
- MOUNTING STRIPS FOR COLOR-LITE LETTERS
- FLEX-WORD UNITS

FREE! Catalog on all Wagner products sent on request.

Name and address of your nearest Wagner theatre supply dealer or sign shop sent on request.

Wagner Sign Service, Inc.
218 S. Hoyne Avenue
CHICAGO 12, ILL.

WAGNER STAINLESS STEEL FRAME AND GL[illegible]NITS

WAGNER MASTER M[illegible]

Wagner Master Multiple Frames employ a series of stainles[illegible] any and all sizes of Wagner letters, since these letters are [illegible]

(An exclusive pa[illegible]

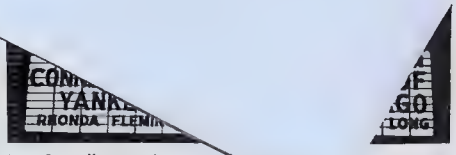
"39" and "41" MODELS In the "39" type the frame [illegible] In the "41" type the fram[illegible] flange which sets over rai[illegible]

WAGNER WINDOW-TYPE FRAME AND GL[illegible]

(Patent Pending)

RECOMMENDED FOR ALL OPENINGS OVER 43" IN HEIGHT





The only marquee frame which affords openings and billing space of any height or length in ONE panel, making it unnecessary to join together a series of small signs. Because of [illegible] construction, Wagner Window-Type Frames can be built in larger sections than [illegible] able with any other design—a vitally important feature with drive-ins where large displays are usually necessary. Accommodates the smallest to the largest letters and life-size photo transparencies. The frames are installed separately and before the glass. Lamps, neon and glass can be removed, cleaned and replaced without removing the frames. No shopwork necessary in the event of glass breakage.

All parts of the sign may be serviced through open windows. Lamps are replaced as easily as though they were exposed. These frames within one year will pay for themselves by elimination of maintenance costs necessary with any other large multiple type frame of four rows of ten-inch letters or over.

HERE'S HOW THEY WORK!

1. *The maintenance man raises a window to gain access to the inside of the sign.*



2. *The window is held open by a small hook. Both hands are free to work inside the sign.*





3. *This is a rear view of one window panel. All panels, except the top one, slide in narrow guide channels, placed at such an angle that each glass slides behind the one above. The glass may be removed by simply raising the panel above the top of the channels.*

4. *This is a rear view of the top panel. Note the short channels at top and bottom. By simply raising this panel above the bottom channel and bringing it down inside the sign the glass may be removed.*

Wagner Sign Service, Inc.

218 S. Hoyne Avenue

CHICAGO 12, ILL.

WAGNER SLOTTED TRANSLUCENT COLORED PLASTIC CHANGEABLE LETTERS*

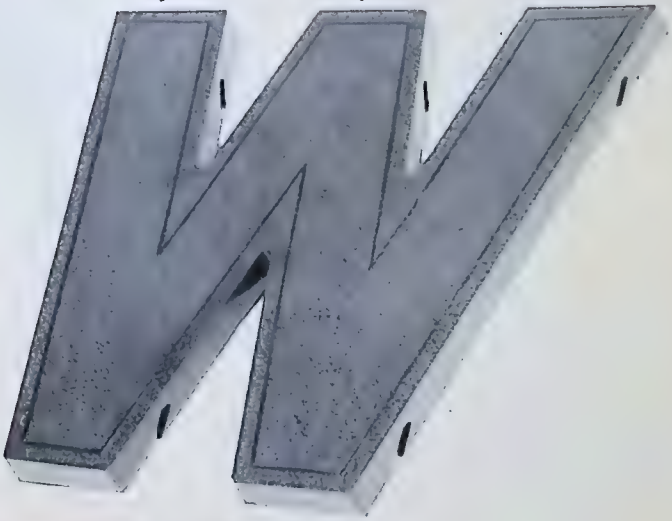
FOR EFFECTIVE SHOW SELLING

Wagner Translucent Colored Plastic Changeable Letters are the modern means of attracting attention and business. Available in five colors and in five sizes, they afford a vivid, colorful display—impossible with other letters. Gorgeously brilliant when light shines through them, they also assume sharply silhouetted third dimensional effect by day.

Wagner Plastic Letters are shock-proof . . . practically unbreakable!

* Slotted letters are patented and available exclusively from Wagner, Patent 2048040 (adjudicated) and many other patents. Wagner's exclusive patented slotted method of mounting prevents freezing to the sign. With more than six times the bearing surface of the lug type letter, Wagner slotted letters assure complete safety. The Wagner exclusive mounting method furthermore permits adjusting the grip of the letters for any fit, from hurricane-proof (so that letters cannot blow together or off the sign) to easy sliding letters that can be moved with a stick. Available in 4", 6", 8", 10" and 17" sizes in red, green, blue, amber and black.

The gorgeous, non-fading, jewel-like colors go all the way through the letters, hence cannot chip or scale. Furthermore, these strong durable letters never require painting or other maintenance. Wagner letters are the only changeable plastic letters that can be stacked for storage without warping.



Wagner Sign Service, Inc.

218 S. Hoyne Avenue
CHICAGO 12, ILL.

WAGNER SLOTTED ALUMINUM LETTERS

30 - 24 - 16 - 12 - 10 - 8 - 6 AND 4 INCHES

USE ONE OR ALL SIZES

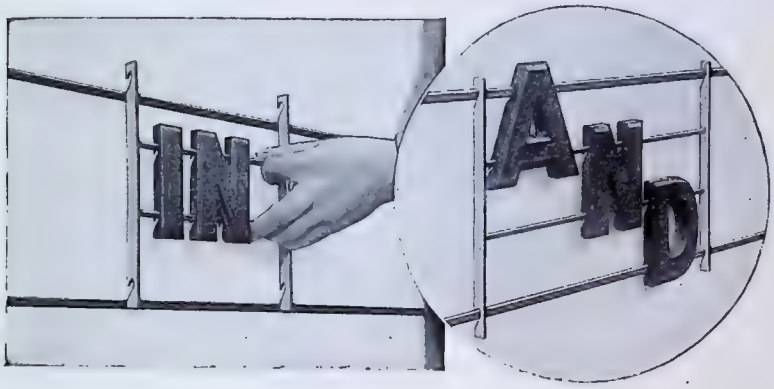
All sizes of Wagner Aluminum Letters are slotted with uniform spacing so that ANY and ALL sizes can be used in the Wagner Multiple Frame. This is an exclusive patented feature. Wagner Slotted Aluminum Letters cannot freeze to the sign.





Wagner Aluminum Letters are available in a wide variety of colors, finishes and styles of type and in more sizes than offered by any other line. Solid Color Cove Letters are made in 4", 8", 10", 12" 16", 24" and 30" sizes. Colored or Aluminum Cove Edge Letters are made in 4", 8", 10", 12", 16", 24" and 30" sizes. Gothic Letters are made in 6", 8", 10" and 12" sizes, and Poster Letters are made in 8" and 10" sizes.

WAGNER FLEX-WORD UNITS



These miniature frames mount on standard Wagner frames of 7-inch bar spacing and provide for the easy forming of units of less important words with 4-inch letters. They save space, permit better use of space and make word-plates unnecessary.

Flex-Word Units are extremely flexible. The 4-inch letters can be staggered in three lines, or two straight lines can be used in a space that ordinarily accommodates one row of 10" letters, as shown in the illustration. Flex-Word Frames are available for either straight or curved attraction boards. Two or more Flex-Word Frames can be butted together to handle long words.

Wagner Flex-Word Frames are available in horizontal lengths of 8, 12, 16, 20 and 24 inches.

Wagner Sign Service, Inc.
218 S. Hoyne Avenue
CHICAGO 12, ILL.

WAGNER TRANSPARENCY FRAMES



Inject the compelling power of brilliant photographic realism in marquee displays by using colored transparencies which you can have made locally. We can provide the solution and instructions for treating.

These transparencies can be made to fit Wagner Patented Transp[illegible] which in turn fit any Wagner Master Multiple Frame, the same as letters.

Wagner Transparency Frames are available in size 21¾" x 25¾" to accommodate 21" x 25" transparencies and in size 30¾" x 40¾" to accommodate 30" x 40" transparencies. Larger sizes on special order.

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In determining the le
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letter, which permits prop
of space on the strip for ea
Mounting strips come complete
ready for installation.

WAGNER LUMINOU

Present a brilliant neon-like ap
4" and 6" sizes in lively flaming re

Wagner Sign Service, Inc.
218 S. Hoyne Avenue
CHICAGO 12, ILL.

SELL EVERY PICTURE



...ers now,
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...ple BUT it deserves
...e best man in your
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...opy and check it for proper

- WAGNER SCALED RUBBER STAMPS & LAYOUT SHEETS

WAGNER PRODUCTS ARE SOLD BY RELIABLE THEATRE SUPPLY DEALERS AND MARQUEE MANUFACTURERS IN YOUR TERRITORY.



Write today for your copy of this big catalog of effective show-selling equipment.

Wagner Sign Service, Inc.
218 S. Hoyne Avenue
CHICAGO 12, ILL.

Interesting Front Remodeling of 1949

Before and After Contrasts Mark the Rejuvenation and Modernizing That Gave Many Theatres a New Face

BRIEF: *Due to the construction boom in drive-in theatres and the sustained pace of approximately 450 roofed theatres that were built and opened during 1949 . . . there is a tendency to overlook the equally extensive major remodeling that took place during that same year . . . The following small segment is merely typical of nearly 1000 theatres that were rejuvenated.*

As the years roll on, and the motion picture theatre industry leaves behind its first 50-year milestone, it has gradually discarded the fluffy rococo ornamentation inherited from its older stage brother, and has taken on a new and more modern functional architectural form all its own. Elsewhere in this volume can be seen the results of this change in 1949's new construction. But what of the older theatres that were either originally stage houses or were built in an era when it was popular to copy such houses?

Each succeeding year finds many such theatres being rejuvenated and modernized. Some are content with a new modern front and lobby but conclude that capacity and potential gross do not warrant the structural changes needed in the auditorium. Others go the whole way, and using only the shell of the old building, do a major remodeling that often results in a new theatre of charm and comfort that is the equal to any completely new one.

On this and the following pages is a dramatic cross-section of such activities during 1949.



THE OLD Hippodrome, Marietta, Ohio, was entrusted to Architects Charles M. and Edward Stotz, Pittsburgh, Pa., and the modern Colony resulted.



THE OLD State, Tampa, Fla., was a small old theatre; but a completely new front, marquee and boxoffice have worked a modern miracle.





THE OLD Fraser, Vancouver, B. C., Canada, was an ugly duckling in the Odeon circuit. A remodeling job produced the modern new Fraser.









OLD AND NEW. Above is the old Balaban and Katz LaGrange, LaGrange, Ill., that was changed into a modern 1450 seat LaGrange by Architect Roy A. Blass, of Chicago. Below is the old Granada, Inglewood, Cal., from which Fox West Coast Circuit produced the new and modern FOX that is a credit to their circuit. At bottom is the rococo old Majestic, Dallas, Texas, as it looked before its recent face lifting and as it looks after a modern front and marquee plus wide use of Formica under the direction of designer Eugene Gilboe, Sr., resulting in a modern showplace.















BEFORE AND AFTER. Above and at the right is one of the outstanding complete remodeling projects of the year, the Strand, Milwaukee, Wisc., which was completely redesigned by Brooks Stevens Assts. The marquee is the inner-service design by Poblocki. Below left is B & Q Associates' Union, Attleboro, Mass., which is one of nearly a dozen New England theatres rejuvenated by William Riseman Associates, of Boston. Below right is Charles R. Lindau's Cinema Annex, which was completely modernized under plans by Alexander and Warren Spitz, of Chicago.









ADLER *Modern*

"THIRD DIMENSION" PLASTIC *and* CAST ALUMINUM LETTERS *with Exclusive* STAINLESS STEEL "REMOVA-PANEL" PATENTED GLASS-IN-FRAME UNITS

Brilliant Changeable Letters of 2-Tone PLASTIC and Cast Aluminum in Popular Sizes, for Interchangeable Use on Adler Stainless Steel, Locked-in-Line Multi-Decker Frames.

FOR MARQUEE OR DRIVE-IN SIGNS



Write for sample 17" "Lok-Lip" SAFETY LETTER to try out in any sign—also free Catalog.

Cannot fall off or blow off the sign regardless of any wind or weather conditions, because this new construction, molded integral, makes these letters *self-locking* on the frames . . . yet *letters are easily handled in and out for quick changing!*

Adler Plastic letters embody the original Adler "Third Dimension" design, with recessed face and triangular bevels. They are toughest and strongest—extra thick—with integrally molded supporting means — practically unbreakable. Combine sound construction with the brilliant beauty of permanent translucent colors.

ADLER "THIRD DIMENSION"
(Trade Mark)
CAST ALUMINUM LETTERS

Come in all popular sizes—4"-6"-8"-10"-12"-16"-24"—for interchangeable use in sizes from 8" to 24"—also interchangeable with Adler PLASTIC Letters—all on the same supporting frames. Sold under positive guarantee that FOR EVERY ADLER CAST ALUMINUM LETTER YOU BREAK, WE GIVE YOU A NEW ONE FREE.

HIGH CHANGEABLE LETTER SIGNS LIKE THIS ARE MADE POSSIBLE BY ADLER PATENTED "REMOVA-PANEL" FRAMES.



FAMOUS PLAYERS Gaiety Theatre, Winnipeg, Canada, a modern, brilliant marquee with 16" and 10" Adler "Third Dimension" Letters on Adler "Remova-Panel" Frames.



Odeon Theatre, Toronto, Canada. THE HIGHEST SINGLE SILHOUETTE CHANGEABLE LETTER OPENING EVER BUILT ANYWHERE! 15 ft. (25 bars) high—45 ft. long, straight and curved. Adler 17" and 10", 2-Tone "Third Dimension" PLASTIC letters and Adler 8"-10"-12"-16"-24" Cast Aluminum letters are used interchangeably on Adler "Remova-Panel" Frame construction. SERVICED WITHOUT REMOVING FRAMES FROM SIGN.



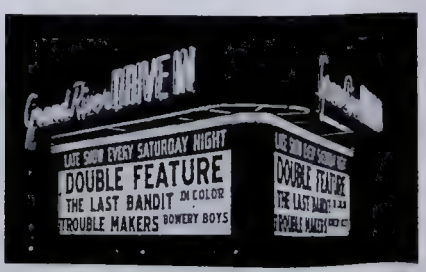
Rivoli Theatre, Broadway & 49th St., New York, a modern program display given unusual power and punch through the use of Adler 24", 16" and 12" "Third Dimension" Cast Aluminum letters used interchangeably on Adler "Remova-Panel" Frames.



Paramount Theatre, Paris, France, an unusual front and distinctive theatre name treatment, with two attraction boards using 16" and 10" Adler "Third Dimension" Letters interchangeably on the same Adler frames.



Dale Mabry Drive-In Theatre, Tampa, Fla., displaying modern, colorful 17" and 10" Adler "Third Dimension" 2-Tone Plastic letters used interchangeably on Adler "Remova-Panel" Frames.



Grand River Drive-In, Farmington, Mich., an excellent example of big, bold, easily read display in 24", 16" and 10" Adler "Third Dimension" Cast Aluminum letters on Adler "Remova-Panel" Frames.

CHANGEABLE PROGRAM DISPLAY

NOTE ALL THESE IMPORTANT FEATURES

"THIRD DIMENSION" PLASTIC LETTERS in popular sizes, used interchangeably on same frames with Adler Cast Aluminum "Third Dimension" Letters—including new 17" "Lok-Lip" Plastic Safety Letter.

"THIRD DIMENSION" CAST ALUMINUM LETTERS in 4"-6"-8"-10"-12"-16"-24" sizes, for interchangeable use of all sizes, from 8" to 24".

"REMOVA-PANEL" EQUIPMENT—Straight or Curved—Not necessary to remove any frame for maintenance.

MULTI-DECKER FRAMES FOR INTERCHANGEABLE USE OF 8" to 24" "THIRD DIMENSION" LETTERS.

LOCKED-IN-LINE FRAMES Stainless Steel—strong, rigid, skyscraper-like construction—light-tight joints.

GLASS-IN-FRAME CONSTRUCTION—we furnish the glass and glaze frames complete before shipment.

FRAMES SET DIRECTLY IN GROOVES OF SIGN—no changes required—no clips to scratch the surface.

POPULAR 10"-16"-24" COMBINATION—letters line up perfectly—larger letters for STARS and TITLES.

TOUGH, BAKED FINISH ON CAST ALUMINUM LETTERS—for long, satisfactory service.

ATTRACTIVE COLORS—standard finish on Cast Aluminum Letters, black face and silver bevels. Red, blue, green, amber or other colors furnished. PLASTIC Letters in solid, permanent colors throughout—red, green, blue and amber.

⅞" WIDE GROOVE CONSTRUCTION—recommended, but we also furnish frames to fit existing grooves as narrow as ¼" wide.

CURVED MARQUEE FRAMES WITH OR WITHOUT CURVED "REMOVA-PANEL"—OR MITRED FRAMES.

WONDERFUL FOR REPLACING OLD STYLE LETTERS. We furnish frames to fit any existing grooves, down to ¼" wide.

APPROVED BY UNDERWRITERS' LABORATORIES, INC.

LETTERS GUARANTEED—For every Adler Cast Aluminum letter you break, we give you a new one FREE.

ADLER Exclusive "REMOVA-PANEL"

(Patented)

STRAIGHT OR CURVED

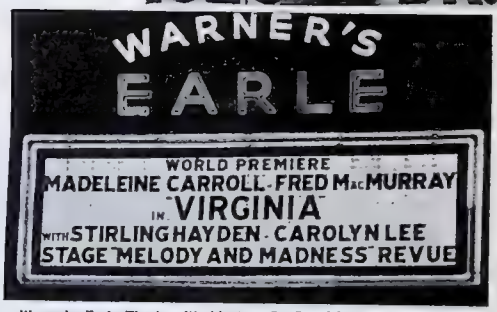
ADLER *Alone* has "REMOVA-PANEL" *frames to fill large openings of any height or length* without divider bars, permitting all maintenance anywhere in the sign through "Remova-Panels", *without removing frames.*

Used for ordinary lamps, neon or fluorescent tubing. "REMOVA-PANEL" units alternate with Regular Type units in the opening, as furnished. Every panel between all horizontal letter bars in standard "REMOVA-PANEL" units is removable panel. 10 YEARS OF CONTINUOUS SUCCESS!





Loew's State Theatre, Newark, N. J. Here the larger 24" Adler "Third Dimension" Letters provide effective display with 10" Letters, all on the same "Remova-Panel" Frames.



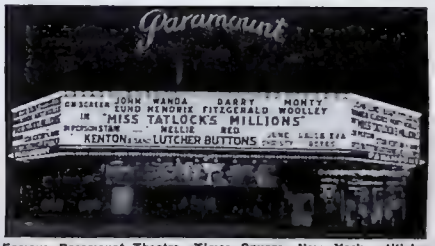
Warner's Earle Theatre, Washington, D. C., visible opening 32' long x 9' high (7½ lines). 8"-12"-16"-24" Adler "Third Dimension" Letters on "Remova-Panel" Frames. Installed January, 1941.



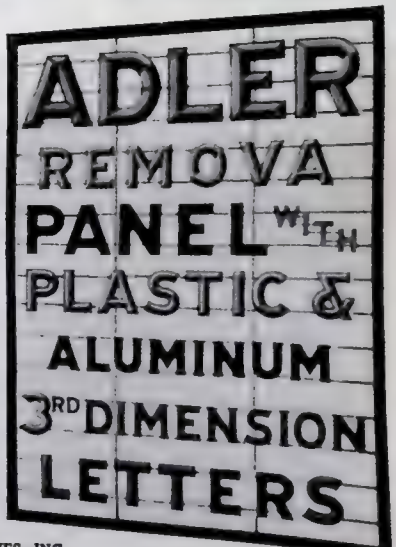
A Fox Theatre installation of 10" and 16" Adler Letters used interchangeably on Adler Frame and Glass Equipment.



RKO Hillstreet Theatre, Los Angeles, Calif., a large, modern straight and curved marquee with 10" and 16" Adler "Third Dimension" Letters on "Remova-Panel" frame equipment.



Famous Paramount Theatre, Times Square, New York, utilizing 17" and 10" Adler PLASTIC "Third Dimension" Letters used interchangeably with Adler 24"-16"-12"-10" Cast Aluminum Letters, all on Adler "Remova-Panel" Frames.





WRITE FOR SAMPLE 17" *"Lok-Lip"* SAFETY LETTER TO TRY OUT IN ANY SIGN — ALSO FREE CATALOG

UNITED STATES PATENTS		Canadian Patents
No. 1,830,414	No. 2,163,298	No. 369,858
No. 1,989,855	No. 2,272,733	No. 411,691
No. 2,038,978	No. 2,284,626	No. 421,193
No. 2,113,285	No. 2,313,723	England Patent
No. 2,144,954	No. 2,313,724	No. 442,512
No. 2,155,904	No. 2,319,910	
No. 2,156,257		

And other Patents Pending

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ADLER SILHOUETTE LETTER CO.

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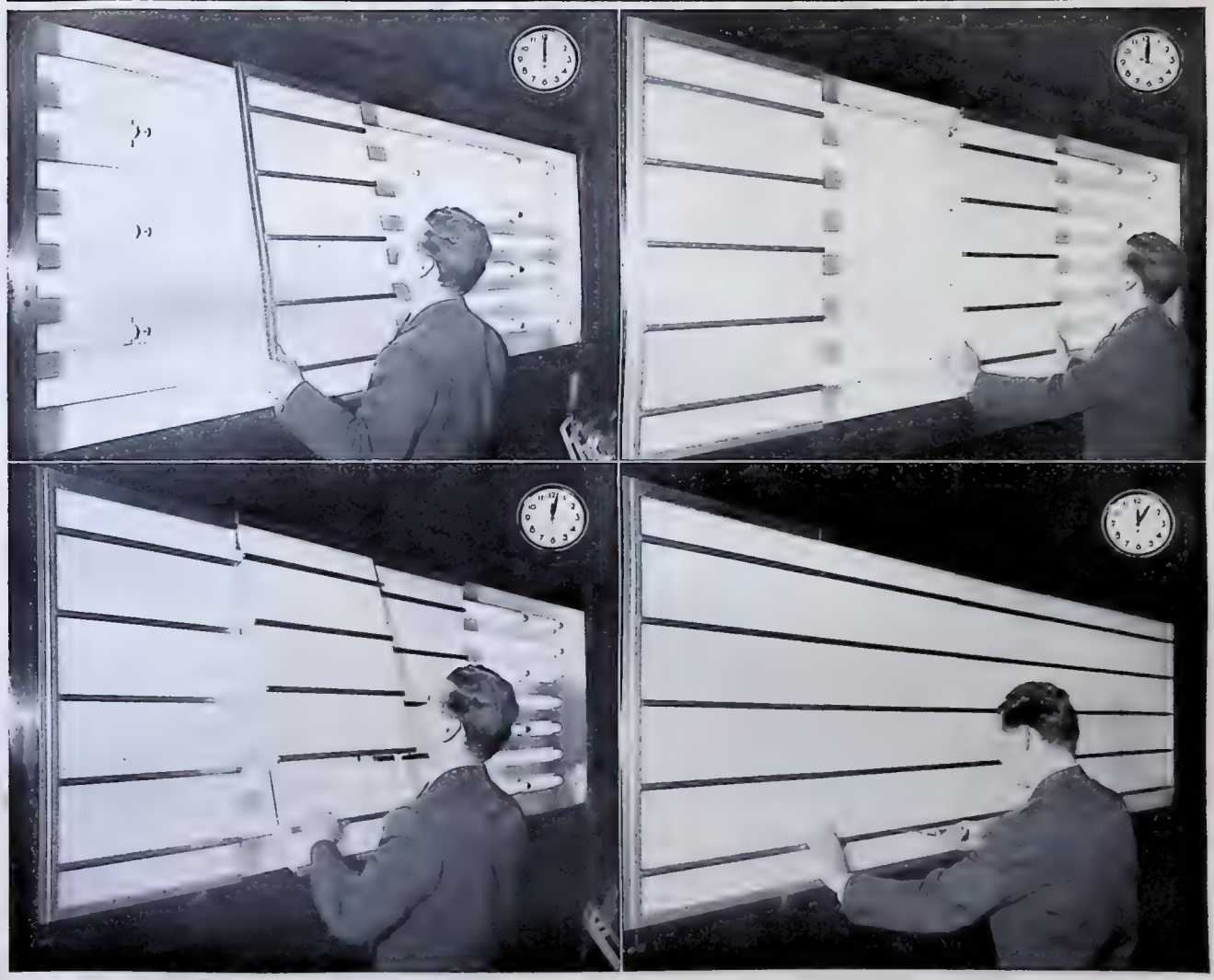
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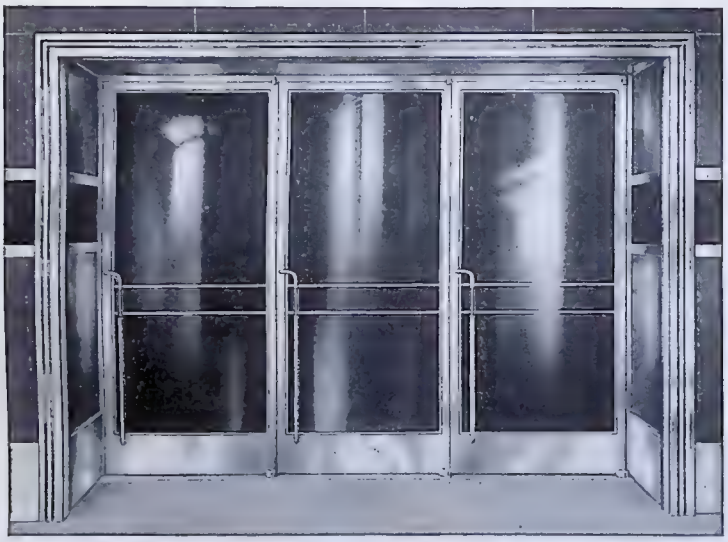
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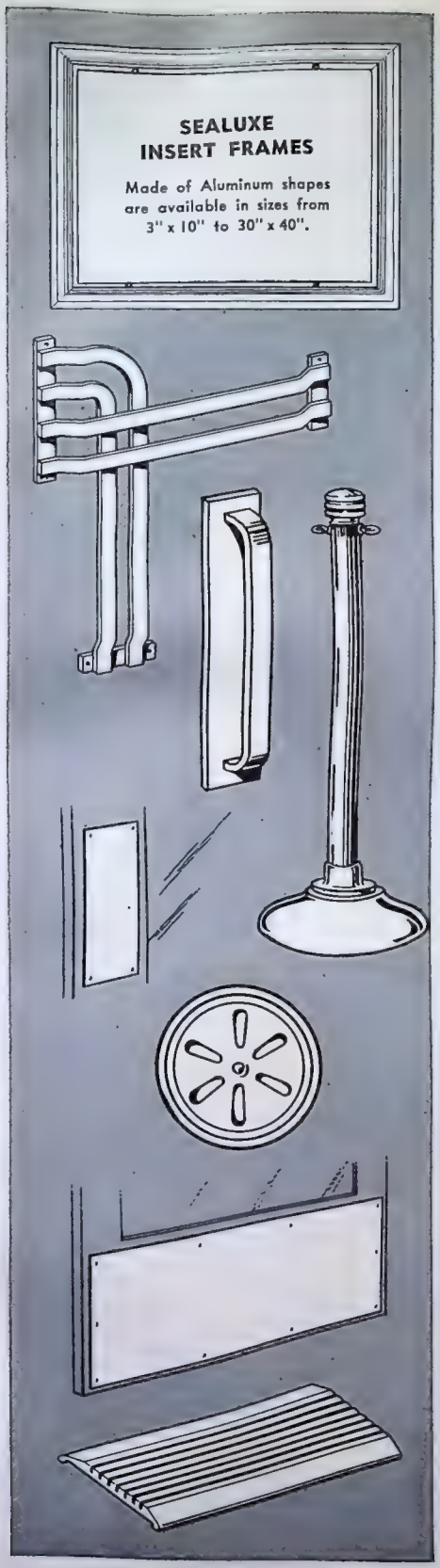


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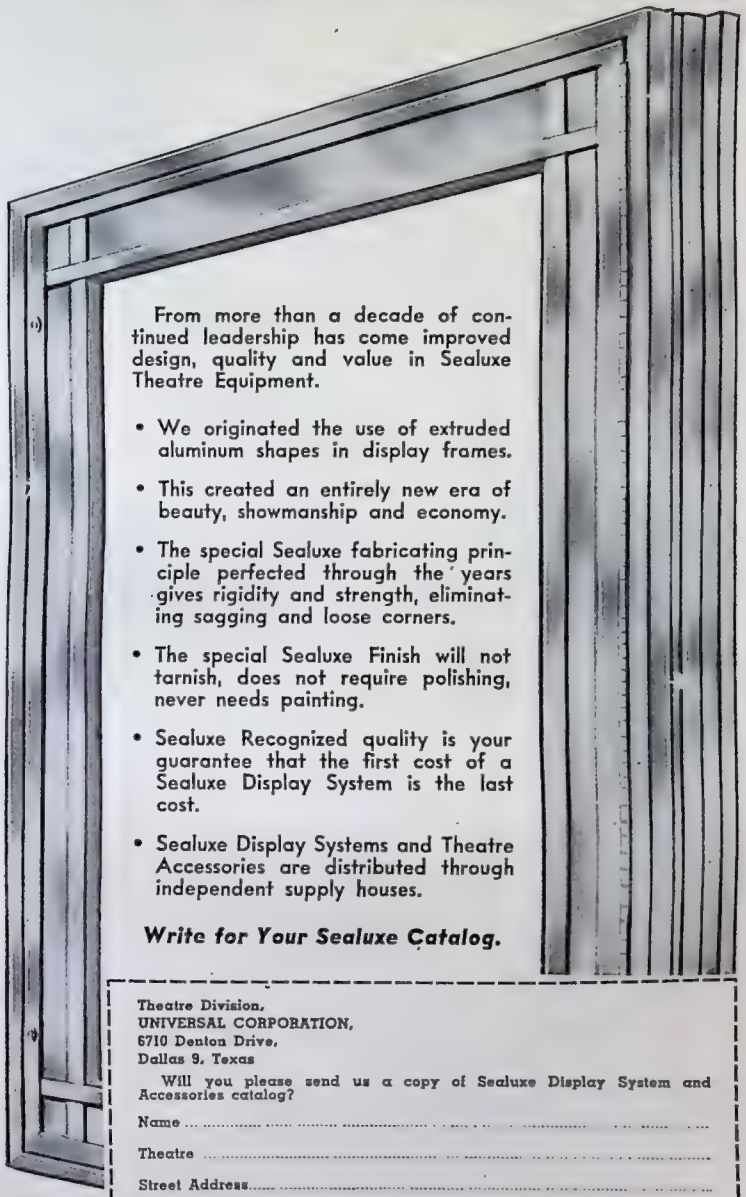
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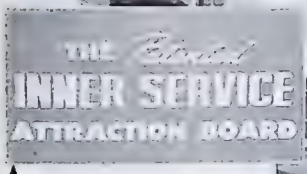
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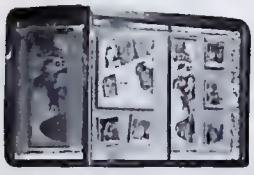








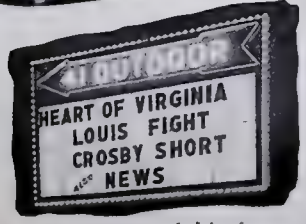
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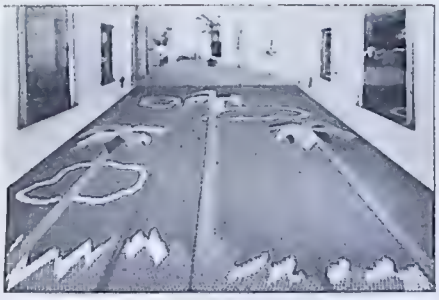
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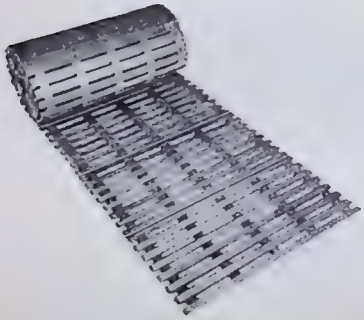
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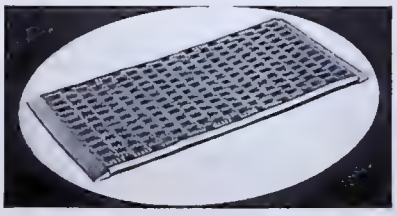
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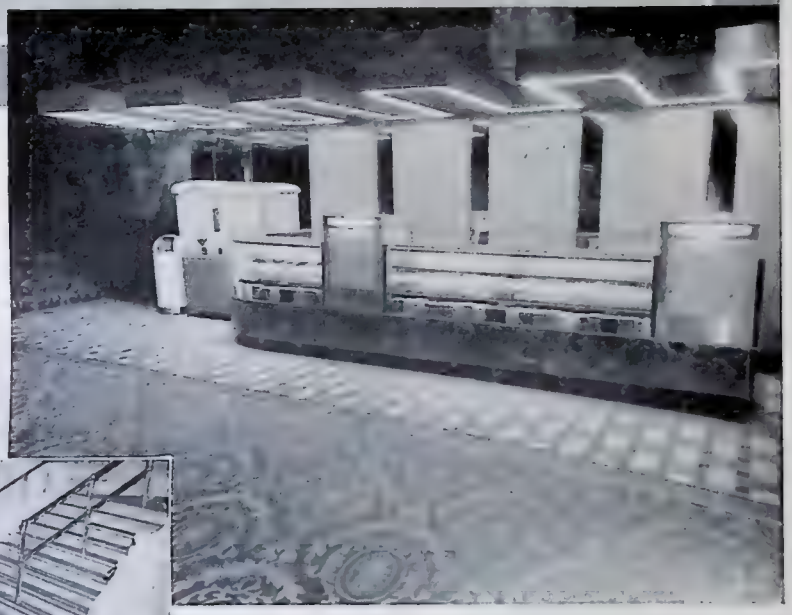
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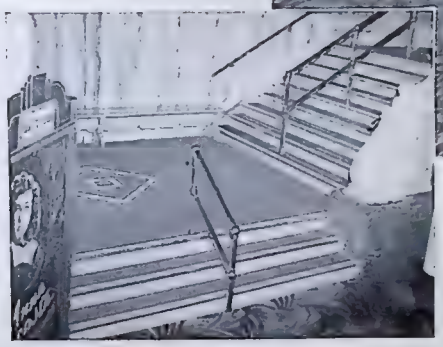
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INTERIOR *and* AUDITORIUM

1949-50

The Audience Sees

Patrons' Visual Comfort Determined By Auditorium Shape and Lighting Design

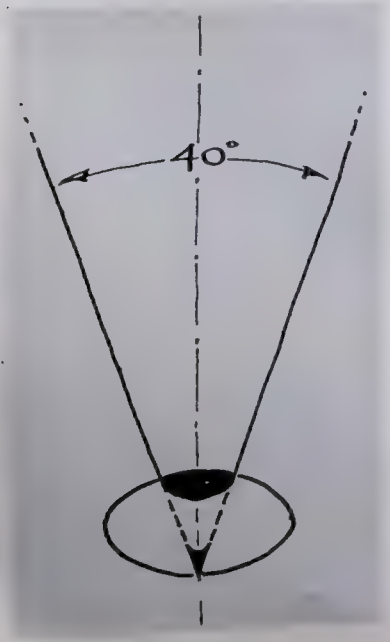
By HAROLD BURRIS-MEYER *and* EDWARD C. COLE

BRIEF: *In order to plan a theatre intelligently, an architect must know the purpose of each important element in its makeup . . . If a practical and feasible design is to be drawn up, a full understanding of function must precede it . . . Function, as it is related to theatre vision and the architectural requisites derived therefrom . . . as they apply to the auditorium . . . form the core of this study . . . Included in the discussion are requirements for the physical layout of the auditorium . . . and the importance of certain factors in auditorium lighting . . . These two fundamental cells in the heart of the modern theatre are . . . as the reader will see . . . important considerations in figuring boxoffice grosses . . . Their proper planning should . . . and must . . . be the deep concern of every theatre architect and builder.*

The audience comes to the theatre to see the show. This is the primary consideration governing all planning on the audience side of the proscenium. The audience generally thinks of the show as that which takes place on the stage or the screen. The competent showman, however, sees to it that the audience feels itself part of the show from the moment it comes within sight of the theatre until it has turned the corner after leaving. He endeavors to make the impact of his showmanship felt every minute the audience is present. He must then provide, by means which the audience appreciates visually, for convenience, comfort, safety; for the audience's desire to see and be seen, the control of attention, the elimination of distraction, the creation and maintenance of mood.

As each member of the audience enters the auditorium he wants to see: the usher, the steps, the aisle, row and seat (including the hat rack), his wife's gloves (on the floor), the program, the show (at an angle and distance consistent with visual fidelity and credibility), the emergency exit, the regular exit. Many members of the audience will want to see and be seen by other playgoers. No member of the audience wants to see a silhouette of the occupant of the seat in front, the show distorted by angle to the side, above, or below, or insignificant because of distance, or an illuminated exit sign, or a twinkling galaxy of orchestra-stand lights when he is trying to pay attention to the show.

THE HORIZONTAL ANGLE of polychromatic vision (no eye movement) is approximately 40°.



The showman wants the audience to see: walls and ceiling only as they contribute to the atmosphere of the theatre, objects of decoration which are significant as focal points in the decorative scheme and contribute to the feeling of luxury, the organ console and orchestra when they are part of the show. The showman wants to conceal from view all elements in structure or equipment which will detract from the desired atmosphere of the house or fatigue the audience, as: backstage areas sometimes visible through the wings, loud-speakers about the proscenium, stage lighting units (balcony pans, insufficiently masked booms at the sides of the house), orchestra and organ console when their visual aspects are not essential to the show, or bright open light sources.

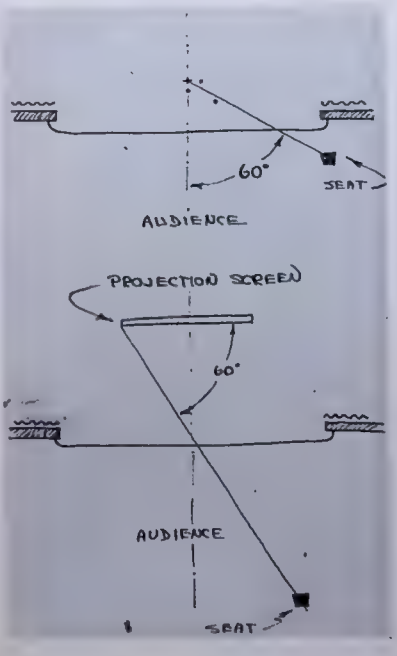
It is the job of the architect to satisfy completely the demands of audience and showman. To ignore or neglect any of the items listed, or to fall short of a satisfactory solution of the problems implicit in them will inevitably increase hazards and impair the theatre's function and earning power.

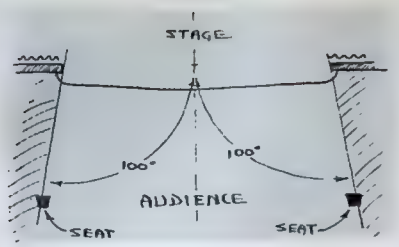
If the patron is to see satisfactorily, plans and section must conform to a number of limitations which are set forth in the following list. To design an auditorium is to determine a seating area within these limitations and to establish position (not shape) of walls and shape of floor therefrom.

1. The horizontal angle of polychromatic vision (no eye movement) is approximately 40 degrees.
2. The horizontal angle to the center line at which objects onstage, upstage of the curtain line, cease to bear the intended relationship to other objects onstage and to the background is approximately 60 degrees.
3. The horizontal angle to the projection sheet at which distortion on the screen becomes substantially intolerable is 60 degrees measured to the far side of the projected image.
4. Judged by the audience's ability to recognize shapes, and confirmed by free audience choice of seats, the following is the order of desirability of locations:
   a. front center (except when the screen is close to the front row);
   b. middle center;
   c. middle side;
   d. front side;
   e. rear center;
   f. rear side.
5. Audiences will not choose locations beyond a line approximately 100

THE HORIZONTAL ANGLE to the center line at which objects onstage, upstage of the curtain line, cease to bear the intended relationship to other objects onstage and to the background is approximately 60°.

THE HORIZONTAL ANGLE to the projection sheet at which distortion on the screen becomes substantially intolerable is 60° measured to the far side of the projected image.





AUDIENCES WILL NOT CHOOSE locations beyond a line approximately 100° to the curtain at the side of the proscenium.

degrees to the curtain at the side of the proscenium.

6. The vertical angle beyond which ability to recognize standard shapes falls off very rapidly is approximately 30 degrees.
7. The recommended maximum angle of motion picture projection to the horizontal is 12 degrees.

Plan

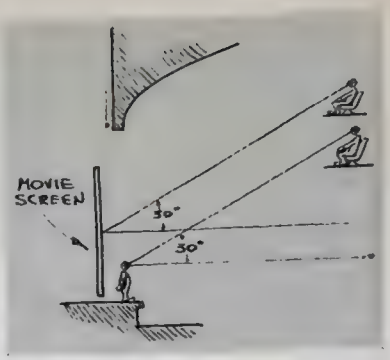
If the foregoing limitations are applied in the horizontal plane for any given proscenium opening, they will limit an area of maximum value as seating space which is approximately elliptical. It is interesting to note that this shape for an auditorium plan was pioneered by the late Joseph Urban who had little of the present data to work with and may safely be assumed to have chosen the shape largely on esthetic grounds. A fan shape provides additional seating space at minimum sacrifice of sight lines, but nobody wants the seats in the extreme rear corners.

Seating

Occupants of all seats are visually related to the performance when the seats are oriented toward the stage. This necessitates curving the rows of seats. The center of curvature is located on the center line of the auditorium approximately the depth of the house behind the proscenium.

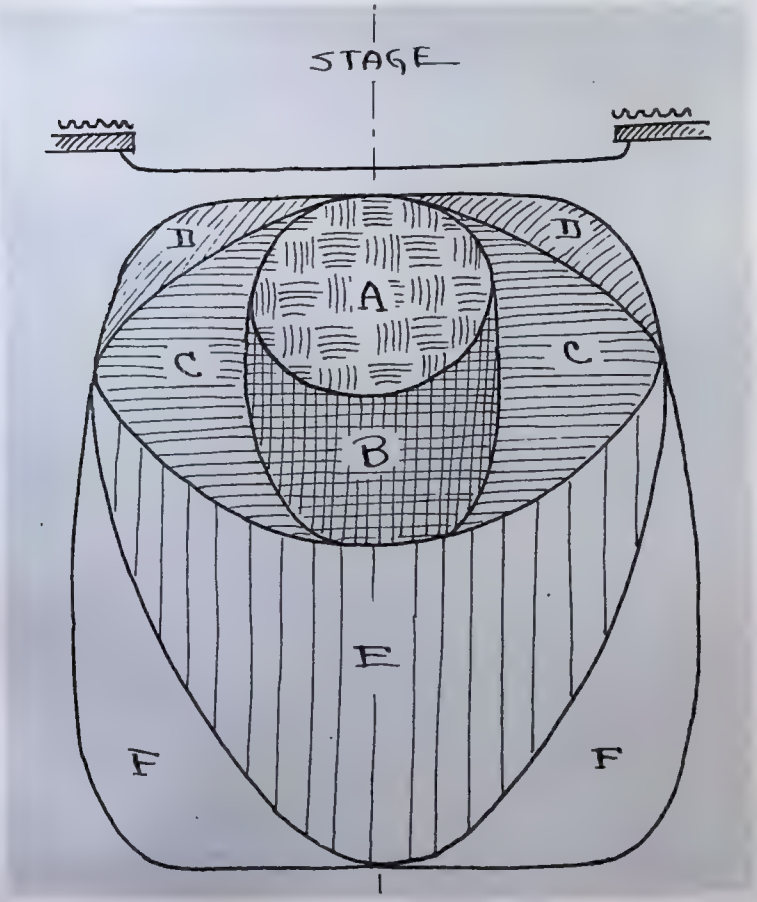
Stagger

To provide best visibility from any seat, no patron should sit exactly in front of any other patron unless more than one row distant. This requirement makes it necessary to stagger seats. Staggering is accomplished by the nonuniform placement of seats of varying widths in succeeding rows. Unless the walls of the theatre are parallel (which is acoustically hazardous), it is extremely unlikely that more than a very few rows can be made up of seats of uniform width. The lack of uniformity thereby introduced provides the means by which staggering can be accomplished. Seats are made with uniform standards and interchangeable backs and seats so that a wide variation of seat width is possible and a variation from seat to seat of an inch or two, cumulatively enough to accomplish satisfactory stagger and make rows even, is not noticed by the patron.



THE VERTICAL ANGLE beyond which ability to recognize standard shapes falls off very rapidly is approximately 30°.

JUDGED BY THE AUDIENCE'S ABILITY to recognize shapes, and confirmed by free audience choice of seats, the following is the order of desirability of locations: a—front center (except when the screen is close to the front row); b—middle center; c—middle side; d—front side; e—rear center; f—rear side.



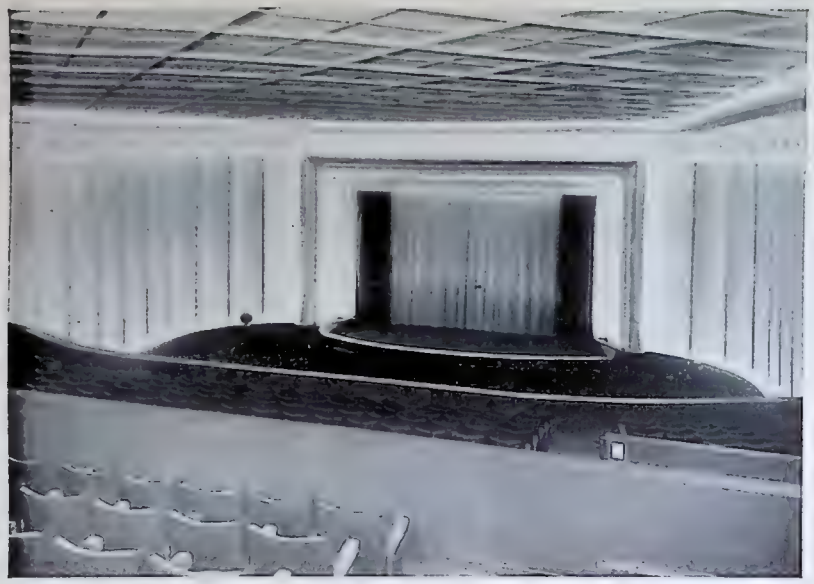
Aisles

Aisles are of questionable desirability except in the largest houses. They must, however, be employed in many localities because of building laws which make no provision for continuous-row or so-called "continental" seating in which all rows are widely spaced and serve as transverse aisles. Many a bad sight line has resulted from putting the maximum legal number, usually 14, seats into each row in every section. Obviously, for purposes of seeing, radial aisles are best, with curved aisles only slightly less efficient. Aisles perpendicular to the curtain line often have the accidental result of making side section seats undesirable. The boxoffice would like a theatre with all seats in the center section. A center section wastes the most desirable seating area in the theatre and inevitably causes the objectionable condition of seats directly in front of each other near the aisle.

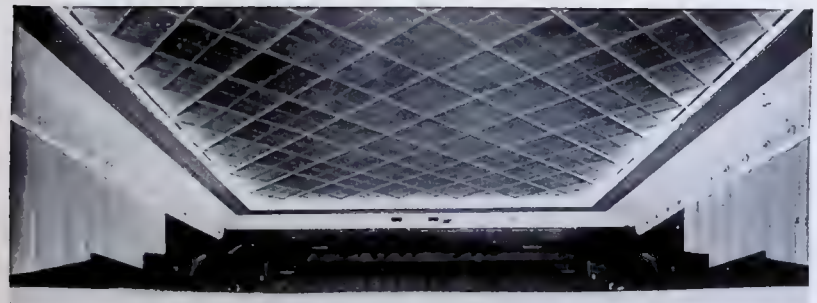
Depth of House

There are many formulas used to determine the depth of the house, or more accurately, to determine the relationship between depth of house, width of house, and width of screen or proscenium. They vary considerably and are all empirically derived on the basis of existing theatres, with too little reference to whether such theatres are good or not. Typical are the following: Optimum depth equals 4 times screen width. Maximum depth equals 6 times screen width. Depth equals 1.25 to 2.35 times house width when house width is 2.5 to 3.5 times screen width. Practically, there are only two significant considerations in planning the depth of the house:

1. Visual acuity—Normal human vision can perceive a minimum di-



CONTINENTAL SEATING in a solid center bank eliminates longitudinal aisles. Here illustrated is the staggered seating to allow all spectators unobstructed vision as found in the Eldorado, Malines, Belgium. This 1713 seat showplace was designed by Architect R. Haan, of Antwerp, for Owner Lamon, of Malines, and opened March 25, 1949. It was furnished and equipped by Fibrocit, of Brussels.





mension or separation equal to 1 minute of visual arc. Translated into space measurement, this means that at 10 feet a normal eye can perceive a dimension of .035 inches, at 50 feet, .175 inches, and at 100 feet, .35 inches. Details of actors' make-up and facial expressions are not plainly recognizable at distances of more than 50 feet from the stage.

2. Capacity—The larger the house, the lower can be the price per seat or the greater the gross. If the box-office is not to be considered, capacity may be limited by optimum seating requirements, and the last rows kept within 50 feet of the stage. As various requirements operate to increase capacity, the distance of the rear seats from the stage must be increased and seeing conditions impaired in proportion. The theatre operator may compensate the occupants of these seats by charging less for them. For shows involving live human actors, 75 feet is generally accepted on the grounds of visibility as maximum house depth.

In theatrical entertainment which has as its chief visual component human actors (flesh shows), the degree to which these performers must be seen to satisfy the audience and put the show across varies.

A. Details of facial expression and small gesture are important in legitimate drama, vaudeville and burlesque, intimate revue and cabaret.

B. Broad gesture by single individuals is important in grand opera, presentation, musical comedy, and the dance.

C. Gesture by individuals is unimportant and movement of individuals from place to place is the smallest significant movement in pageant.

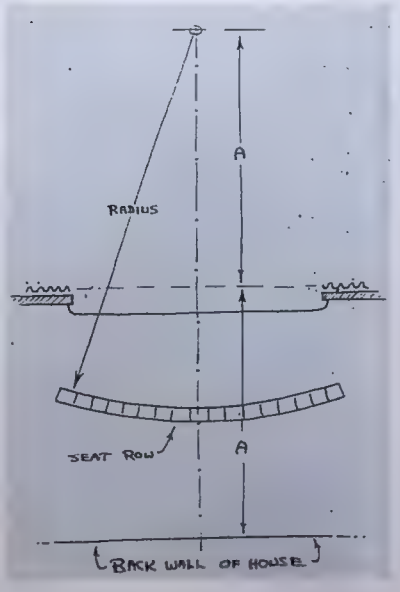
It follows, then, that theatres planned for the types of entertainment listed under A must be limited in depth of auditorium so that visibility from the remotest seat still allows the occupant to perceive facial expressions (not over 75 feet).

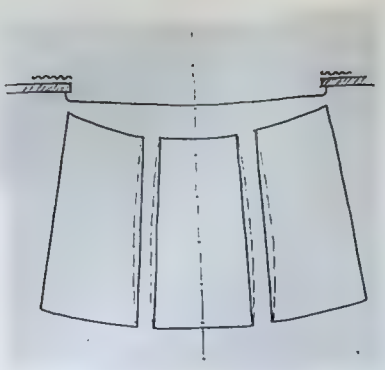
Theatres planned for the types listed under B may have greater distance from the stage to the remotest seat, but this distance is set at a maximum beyond which the individual actor is diminished to insignificance (approx. 125 feet).

Spectators in the last rows at the Radio City Music Hall in New York, looking through a distance ranging from 160 feet to over 200 feet, depending on the location of the performers onstage, see a ballet reduced to the size of midgets, and an individual performer, even with the dramatic enhancement of a follow spot, is a very insignificant figure indeed.

Given the proscenium opening and capacity, laying out the orchestra and balcony or balconies in plan becomes a simple and straightforward process. Sight lines determine proscenium splay and house width. Visibility limits and capacity determines depth. Minimum distance from stage or screen to first row is determined in the section.

LOCATION OF CENTER of curvature of seat rows.





RADIAL AISLES are best.

Section

The vertical angle of 30 degrees at the spectator's position establishes the distance from the closest seat to the screen or to the highest significant object on the stage. The lowest seat in the orchestra must be located where the patron can just see the stage floor (except in the case of theatres built for motion pictures only). The highest seat in the balcony must be on a line which is not more than 30 degrees to the horizontal at the front curtain at the stage floor if it is not to be beyond the limit of reasonable distortion. The standee at the back of the orchestra must be able to see the top of the screen, which is usually as high as any significant portion of a stage setting. Each spectator must see the whole stage or screen over the heads of those in front of him. Within these limits the floor slope of orchestra and balcony can be laid out: the first step in determining auditorium section.

Several methods have been offered heretofore for developing the floor slope. Doubtless others will be offered in the future. The authors present the following method as one which assures unobstructed vision from all seats. It may be noted that this system produces a floor slope considerably steeper than that in many existing theatres. It also produces better seeing conditions.

To determine floor slope, establish eye position of spectator on first row in center line by approximately 30 degrees vertical angle above. For live shows, stage floor will be approximately 2" below this level. For theatres designed solely for motion pictures, the location of the stage floor is not critical; the position of the bottom of the screen is.

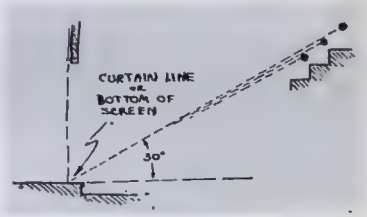
A point 3'-8" below, and 18" in front of the eye position will be the floor level for the front row. Draw a sight line from the eye position to downstage edge of stage, and extend it back of the eye position for the front row and draw vertical lines at the points thus established. Establish a point 5" above the intersection of the extended sight line and the vertical line just established. This is the eye position for the second row and the floor level at the front edge of the second row seat is 3'-8" below and 18" in front of the eye position. Repeat this process to the back of the house and draw in the floor slope. Where the slope exceeds 1½" per foot, platforms are required.

The standee's eye level behind the rear row of seats is assumed to be 5'-6" above the floor level of the last row. The sight line from this position to the top of the screen or highest probable curtain trim establishes the minimum height for ceiling under balcony.

Raising the stage will reduce the floor slope. If the stage floor is above the elevation of the first row eye position, the upstage portion of the floor will be invisible from the first row. It is generally preferable to leave the upstage floor out of sight by perhaps as much as 6" from the first row, to having an excessive floor slope, especially if more than one balcony is used.

When planning for motion pictures only, the lower sight line from the first row will come to the bottom of the projected picture, approximately 24" above the stage floor, or still higher if a reverse floor slope is planned.

In laying out the balcony, sight lines are laid out from rear to front because it is unsafe to change balcony slope. The focal point onstage is the point farthest downstage at which visibility is requisite, or, in the case of motion pictures only, the bottom of the screen. The maximum forward extensity of the balcony is then determined when the location of the spectator's eye position has been moved forward to a point beyond which the floor and supporting structure would intersect the upper sight line of the orchestra standee.



MAXIMUM tolerable sightline angle.

As a rule, the pitch of balcony floors should not change since that would entail a change of riser height for aisle stairs and introduce attendant hazards. If vision from the rear row in the balcony is adequate, the rest of the balcony is satisfactory.

In theatres designed only to show motion pictures, the first row need not be located so that the patron can see the stage floor. It is satisfactory if he sees without obstruction the bottom of the screen which is seldom placed less than 2' above the stage floor. Raising the screen makes it possible to flatten the contour of the orchestra. The Ben Schlanger reversed floor slope makes use of this relationship to get the maximum number of seats into the one of least visual distortion.

Floor Dish

The planning of the floor slope is not completed when pitch of orchestra and balcony has been laid out on the center line. It depends also on the curve of the rows of seats. The whole row must be at the same elevation if the seats are to be level. The floor, therefore, is not a sloped plane, but a dished surface in which horizontal contours follow the seat row curve. The floor section at the center line, rotated horizontally about the center of curvature of the rows of seats, will determine the orchestra floor shape. The balcony is planned in the same way.

Sight lines have established wall positions and floor shapes, and the limits of visibility of detail, the depth of the house. Only one factor remains: to establish the maximum capacity and that is determined by the width of the acting area.

Comment

It has been established that conditions of seeing limit the depth of the house. Since capacity is a function of depth and width, increasing the width increases the capacity. However, since sight lines from the side seats limit the angular spread of the side walls, the width can only be increased by increasing the proscenium opening. The width of the proscenium opening is a function of the kind of productions contemplated for the theatre, according to the following table, and cannot be arbitrarily increased.

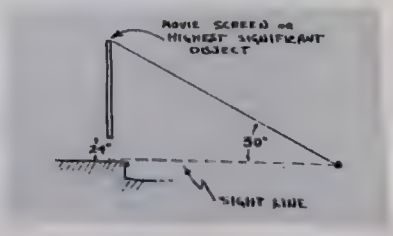
Proscenium Widths for Kinds of Theatrical Production in Feet

	Minimum	Usual	Reasonable Maximum
Drama	26	30 to 35	40
Vaudeville, Revue	30	35	45
Musical Comedy, Operetta	30	40	50
Presentation, Opera	40	60	80

It is apparent that a theatre designed for maximum efficiency for motion pictures (reverse floor slope) is almost completely useless for any other sort of production except large screen television, a single performer, or at most a quartet.

In cases where it is unnecessary to build to minimum visibility standards, wall angles may be narrowed, floor angles increased, and balcony omitted, and visibility from the worst seats thereby raised to a point considerably better than what is just saleable. A very real problem, however, is to prevent

MAXIMUM tolerable angle to top of screen.



precedent or personal prejudice from so influencing auditorium design as to cause the inclusion of large numbers of unsaleable seats. One manager insisted, after floor slope and stage height had been determined and the auditorium floor laid, that the stage floor be lowered some 10 inches below the height called for in the plan, in the interests of, as he put it, "intimacy." From the middle of the orchestra in that theatre it is hard to see below the level of the actor's navel.

Greek theatres were semicircular (horizontal sight line angle 90 degrees to center line). This was all right in Greece where there was no proscenium. It is obviously not all right where a proscenium is used or where realistic box sets are employed. Yet, a misguided reverence for ancient practice still gives us some theatres with impossible sight lines.

Opera houses of the Renaissance had side boxes for the very good reason that the people in the boxes competed (often successfully) with the stage show for audience attention. This condition persists, but it is worth noting that the best example of such a theatre in America has not made a nickel for a decade. Nevertheless, theatres with at least vestigial side boxes are still built.

It is perhaps unnecessary to add that theatres planned in conformity with the principles here set forth may adhere in spirit to almost any superficial architectural style by the discreet planning of service and decorative elements which do not affect the basic shape of the theatre. In theatres which are being rebuilt, it is often possible to retain the desirable features and still provide a good theatre.

Light

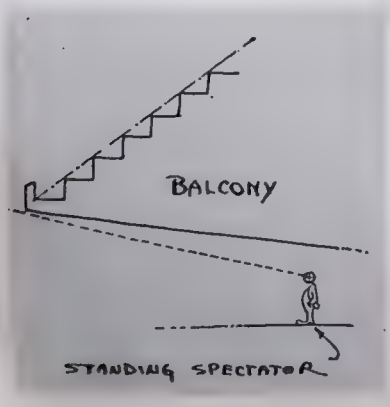
Seeing requisites determine the shape of the house and to some extent its size. They also determine the provisions for house illumination.

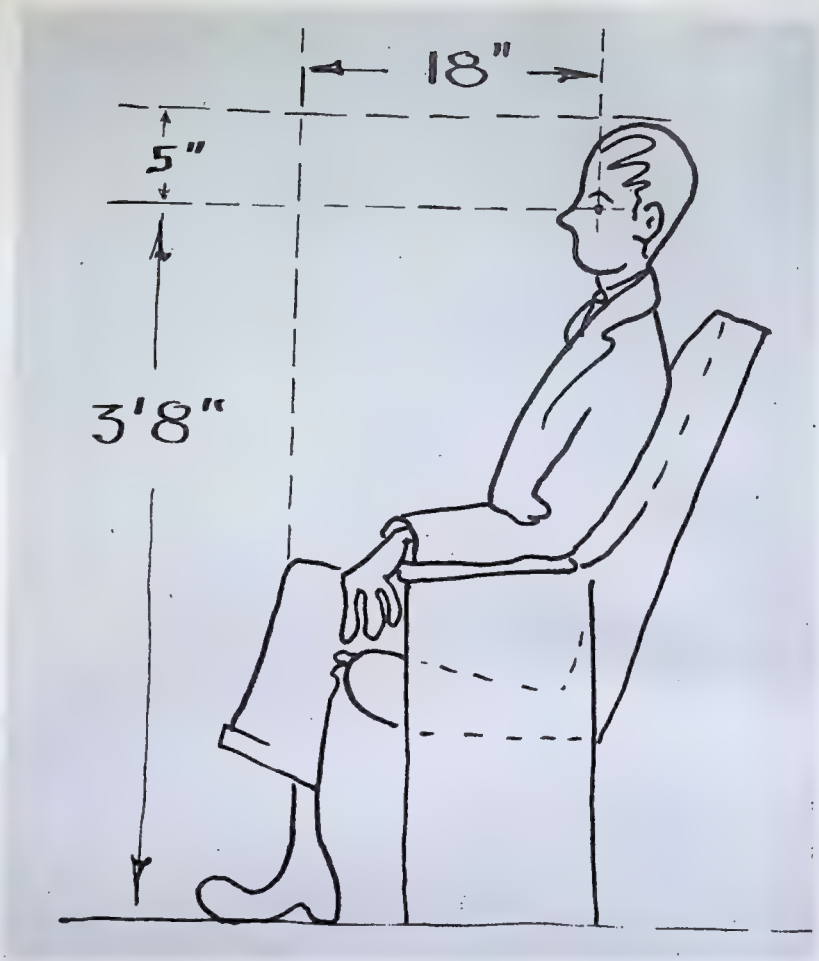
Requisites for lighting are mentioned earlier in this article. There are three basic functions involved:

1. Visibility
2. Decoration
3. Mood

To fulfill these functions it is necessary to plan the lighting for each separately, combining instruments only if and when the requirements are satisfied.

THE SIGHTLINE of the standing patron limits the balcony overhang of any balconied theatre.





BASIC DIMENSIONS for plotting floor slope.

It is axiomatic in stage lighting that a different light is assigned to do each job. The McCandless method is the most economical of any method which can accomplish a creditable result, and it does not duplicate functions of any instrument or group of instruments. This basic approach is as applicable to the house as to the stage, as examination of houses thus lighted will show.

It is as important to keep light away from areas where it is not needed as to get it where it is wanted, and a great deal harder. To the application of this principle we may trace much of the improvement in appearance and comfort that has come to interiors in the last two decades.

The best light by which to read the program will not produce a pleasing effect if it strikes the walls. The light which gives the house warmth and intimacy will require programs in Braille if that's all the light there is. The bunch light, chandelier, sconce or other open light source may be a desirable decorative device, but if it is bright enough to see by, the audience won't see anything else, and will be seeing spots instead of the show when the curtain goes up.

Visibility

Light for visibility in the auditorium by which the patrons may find their seats, read their programs, and recognize their friends must be generally distributed with a minimum of shadows and preferably from concealed or low-brightness sources installed in the ceiling, the light passing through small holes or louvered openings. Even distribution at a relatively low level of intensity (3 to 5 foot candles) is desirable. White light is best. Light thus controlled will not upset the balance of the house; in fact, the house may seem dim, though the patron sees and is seen. And the light source will not be seen unless the patron looks directly upward, and not many theatregoers do that often or gracefully.

Special visibility lights are requisite for safety. Building codes in many localities provide that in the interests of safety, aisle lights be provided near the floor on each or on alternate aisle seats. This number is clearly in excess of what is needed to give the requisite visibility, but a minimum safe number and arrangement of such lights is one for

every three rows on alternate sides of the aisle, plus lights on both sides wherever there is a step or change in pitch of the floor and at intersections and ends of aisles and crossovers. Luminous guide lines and tread edges in the carpet, activated from ultraviolet sources, promote safety with minimum distraction.

All doors must have exit lights over them. Most fire regulations require that the lights be red. It is unfortunately true that red lights attract attention even when there isn't any fire. When they are close to the arc of vision of the spectator, they often constitute a source of visual distraction. Blue exit lights are perfectly visible when the spectator wants to see them, but do not obtrude into his consciousness when he is looking at something else. Therefore, blue exit lights are desirable.

Decorative Lighting

Decorative lighting is a part of the decorative scheme. In itself and by means of that which it illuminates it establishes the character of the house. It does this by:

1. Illumination of walls, ceilings, and proscenium: balanced background lighting, intensity less than for audience area, color chosen to give desired quality to wall and ceiling color.
2. Highlighting of focal points in decorative scheme: niches containing objets d'art, wall hangings, etc.
3. Decorative lights: chandeliers, sconces, etc.

The instruments for decorative lighting may be concealed direct sources, or indirect cove lights, to illuminate the walls and ceiling. Transverse ceiling louvers reduce the apparent depth of the house. Highlights, of course, require special instruments. Open light sources serve a decorative purpose (chandeliers sometimes serve an acoustic purpose) only when they can be seen by a considerable portion of the audience. If they are bright enough to supply illumination they are more annoying than attractive, and are therefore to be thought of as decorative objects rather than as lighting sources. They may contain concealed lighting sources for visibility, decoration, or mood.

Mood

It has never been absolutely established that the use of an appropriate color in house lights can do much to set the mood called for by the play in advance of the curtain, though theory inclines in that direction and almost every director will try to accomplish something by means of color if given the opportunity. Color control on house lights is always useful for spectacle, as is amply demonstrated in New York's Radio City Music Hall, and it is probable that that fact alone justifies provision therefor. To achieve it, two things are necessary: concealed lights in primary colors controlled as are the footlights, and a neutral tinted wall and ceiling surface to be illuminated by those lights.

Distractions

The music stand lights are often a source of a good deal of distraction and consequent annoyance to the audience, except perhaps at some performance of the opera where the enjoyment is in inverse ratio to the visibility of what transpires on the stage. While it is easy to mask the music stand lights, it is impossible to stop reflection from scores and thus a relatively bright area will be in the audience line of vision whenever the musicians are visible. There are several ways to overcome this:

1. An orchestra lift.
2. A deep pit.
3. A louvered orchestra pit cover.
4. Scores with white notes on black paper.

Comment

There are two elements which tend to prevent the lighting of auditoriums from being as good as it should be:

1. The unwillingness of architects to plan lighting before wall and ceiling shapes are settled. This is a result of ignorance, and the consultant is called in more often to correct what has been incorrectly built than to insure the correct design of a theatre. The design, construction, installation, and consultant's fee for one of the most elaborate theatre lighting projects in America cost less than just the installation costs in many smaller theatres lighted without expert counsel, and badly done.
2. There is an inexplicable illusion among some architects and builders that light must come from "fixtures," despite the obvious fact that if you hang a light out where you can see it, when it is turned on you can't see much else.

* * *

Source Credits

The editors of THEATRE CATALOG are grateful to: the publishers of the monthly *Progressive Architecture*, in which this article was serialized prior to publication as Chapter III of the current book *Theatres and Auditoriums*, and to Robert E. Costello, Jr., for the drawings accompanying the text.

FROM ITALY and the drawing boards of their leading theatre specialists, Architect Mario Cavallo, of Milan, comes this illustration of the auditorium of the big 2300 seat Orpheo in Milan's suburbs. As a post-War accomplishment complete with air conditioning and all modern appointments it promises many interesting future developments from this gifted designer who has many fine theatres to his credit. This is typical of current world expansion.



M. P. A. Builds a Model Theatre

There is No Admission Charge But There Will be More Celebrities-per-seat Here Than in Any Other 71 Seater

BRIEF: *Conclusive evidence that grandeur and bigness do not of necessity go hand in hand was brought prominently to the fore recently with the opening of the tiny Academia in the Nation's Capital . . . Just pride of the Motion Picture Association of America, the novel little house will be patronized primarily by important Washington dignitaries . . . No stone has been left unturned to make the miniature exhibition place a veritable glamour spot for the exclusive, upper-bracket patronage it will serve . . . A splendid example of what architect, builder, and decorator may accomplish in theatre planning . . . even within minimum spacial confines . . . the picturesque Academia can justly lay claim to a prominent spot in the Washington merry-go-round.*

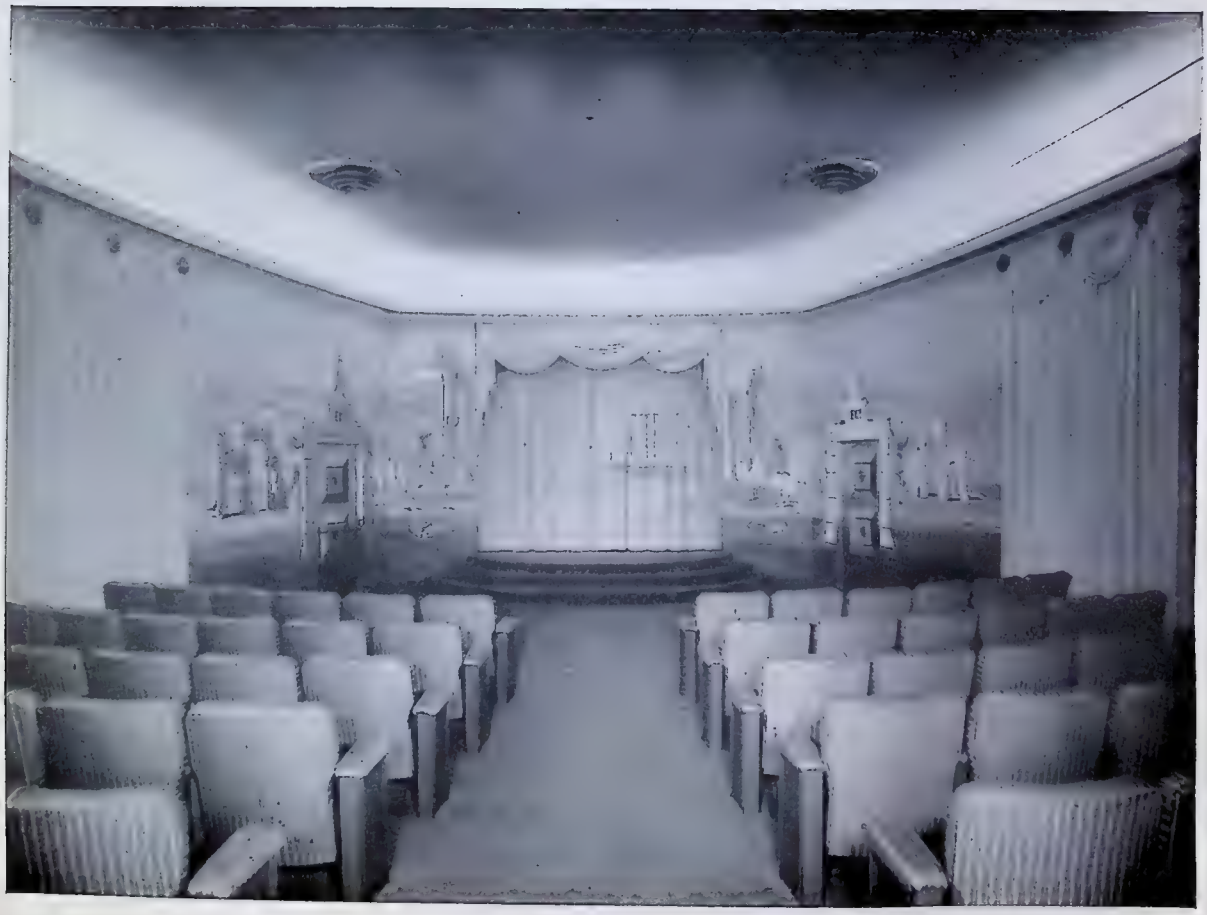
As a general rule, extremely small theatres of screening room size employ 16mm projection equipment, and no especial pains are taken in furnishing them; such is not the case, however, with the unique Academia, Washington, D. C. This small 71-seat showplace, owned and operated by the Motion Picture Association of America, constitutes the first wing of what eventually may be a new building for the organization. In spite of its diminutive capacity, the Academia uses orthodox 35mm equipment and has been lavishly appointed in a luxurious fashion. The fact that this theatre has been outfitted with such fine furnishings as a "model" for the industry is, of course, largely due to its function as a "class" house to be attended primarily by Motion Picture Association, government, and other important officials. The Academia's gala opening on November 22, 1949, was attended by President and Mrs. Truman, members of the cabinet and their wives, heads of MPAA member companies and their wives.

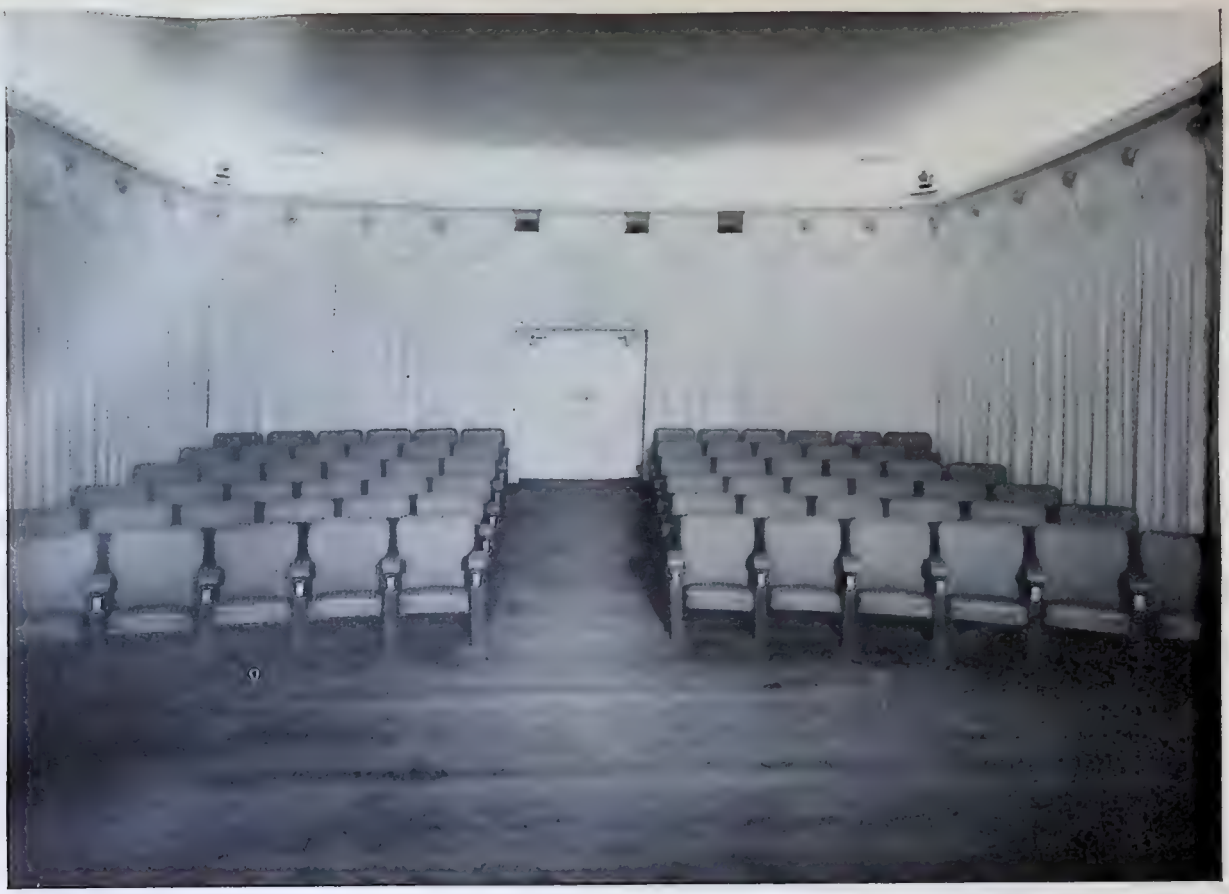
Physical Description

The modern, neo-classical structure of the Academia, measuring approximately 75 feet long and 50 feet wide, was designed by Architect Aymar Embury of New York and constructed by Irons and Reynolds of New York and Washington with reinforced concrete and steel to accommodate the rest of the proposed building. The interior of the theatre, to which entrance is gained through the Association building, also follows a modern-Grecian style.

The house itself is divided into three parts—a small mirrored foyer, a recep-

INTERIOR of the Academia, Washington, D. C. This 71-seat gem was recently constructed in a wing of the M.P.A. offices and no money was spared.





COMFORT AND DIGNITY produce unequalled charm. Each Heywood-Wakefield pillowed chair has an ash tray, and the floor is thickly carpeted.

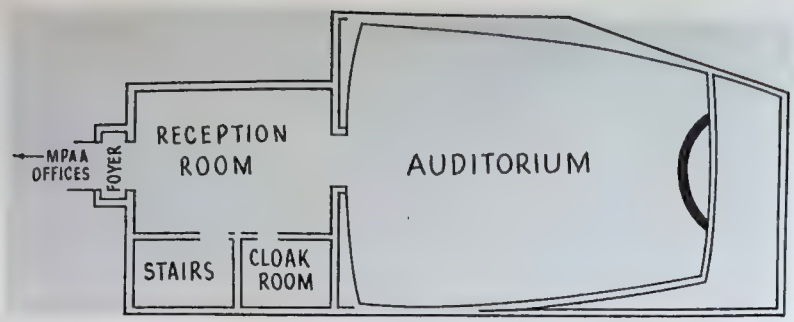
tion room, and the auditorium proper. The decorating firm, John C. Greer Associates of Washington, has made full dramatic use of color throughout, but the net total effect is one of sober dignity and good taste.

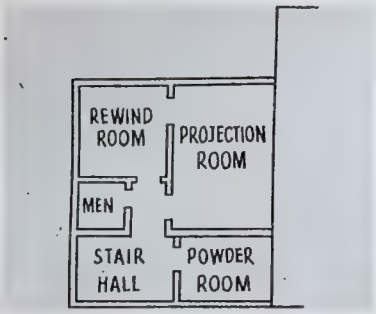
Mauve predominates in the color scheme of the foyer and reception room. The two casement windows in the latter chamber are covered with satin drapes of blue and off-white satin stripes, while rich carpeting adds a luxurious touch to the floor. Small ornate lamp holders are set into the walls, and a number of colorful framed pictures pleasantly fill vacant spaces. Several pieces of comfortable, modern-Grecian furniture are situated in the reception room for relaxation and use by visitors. The entire decor of the reception room makes it a highly suitable spot for official functions which may well precede or follow many of the theatre's showings. The doors leading off the reception room into the coat room and to the stairway are painted with lifelike Grecian heads. On the second floor are situated the rest rooms, projection booth, and rewind room.

One enters the auditorium through double doors decorated with Grecian figures also. The rear wall of the theatre is approximately 50 feet wide, but the

OPENING NIGHT featured the attendance of President and Mrs. Harry S. Truman, the former here seated with Eric A. Johnston, President of the M.P.A. Standing are many industry leaders, left to right: Spyros Skouras, of 20th Century-Fox; Ned E. Depinet, of RKO-Radio; Jack Cohn, of Columbia; J. J. O'Connor, of Universal-International; Joseph H. Hazen, of Hal Wallis Productions; Major Albert Warner, of Warner Brothers; Nicholas M. Schenck, of Loew's; Barney Balaban, of Paramount; and Theodore Black.







FIRST FLOOR PLAN illustrates the ideal shape of the auditorium and the manner in which it connects with the adjoining service rooms on both its own level and on the upper one. This entire theatre suite is connected with the general offices of the M.P.A. through a foyer and hall, so that its ready use by visitors or executives is facilitated.

THE RECEPTION ROOM compliments the classic charm of the auditorium. Below are detailed photographs of the four sides of this room illustrating to good advantage the taste that has been demonstrated in its architecture and appointments. Reflecting credit on Architect Aymar and on Decorators John Greer Associates, it is certain to earn the admiration of any visiting dignitary.

side walls curve in toward the screen to give the house a front-end width in the neighborhood of 30 feet. A mural, done in Grecian designs with figures and ruins, occupies the front third of the theatre by running continuously from the side walls across the curtain. The remainder of the auditorium wall space is covered by soft, powder-blue drapes; the valance above the 7½ by 10-foot screen, as well as the ceiling, carries a similar color tonality. Soft, cold cathode lighting emanates from a ceiling trough to provide general illumination, while two small cold cathode light spots at the rear of the auditorium are directed at the murals on either side of the screen to accent the colors.

The 71 Heywood-Wakefield chairs are covered with a blue Roman material, blue and mauve stripped with a thin gold stripe. The foam rubber seats have self-adjusting backs and are equipped with individual ash trays. Six rows of chairs with six seats in each row are set on both sides of the center aisle. The second row from the right rear, however, contains only five chairs with the extra space allocated for a telephone and sound control system.

Simplex E-7 projectors and dual channel sound, Peerless Magnarc projection lamps, and Walker P. M. sound screen, complete the lush excellence of this pride of the distributor-producer organization.









Escalators to Aid Balcony Patronage

Elimination of Stair-Climbing Fills Empty Seats By Attracting Increased Use By Adult Patronage

BRIEF: *Throughout its colorful history, medical science has devoted a good bit of attention to the cardinal concern of mankind . . . the prolongment of human life . . . One of the most important pieces of knowledge . . . to emerge from long years of research and experience . . . is the fact that the heart . . . focal point of the entire human body . . . must be carefully guarded against strain when one approaches middle age.*

This need for avoiding as much strain on the heart as possible has been widely publicized . . . to the extent where many older people are reluctant to climb any type of stairs . . . including the stairs to a theatre balcony . . . The result has been a loss of a sizeable percentage of admissions from theatre patrons in the upper age brackets . . . who cannot afford to attend as frequently at the higher prices charged in many theatres, for first-floor seating. It has also caused S. R. O. on first floors while ample seats are unoccupied in the balcony.

Balconies must be kept filled, however, if boxoffice reports are not to suffer . . . and the vacant chairs should largely be occupied by those who now stay away from the theatre . . . due to the long climb up to the balcony . . . The following article suggests a simple method . . . the escalator . . . by which these "lost" patrons may be attracted back to the second level.

Statistics show that one third of the population of the United States is over 35 years of age, and it is anticipated that during the next 12 months the dreaded scourge of heart disease will claim one-fifth of its victims in the 35 to 55 age group. In the group from 55 to 74 years of age, the death toll claimed by heart disease will be even higher—approximately three-fifths of the total number of fatalities.

At first thought, these figures may not appear to be of much importance to the theatre owner. In actuality, however, they deserve his careful consideration because they explain in part the reason why the nation's 19,000 odd motion picture houses are not filling their nearly 12,000,000 seats as consistently as they should.

As a result of the extensive publicity devoted to heart disease in recent years and the methods by which its victims may prolong life, an increasing caution about undue exertion has developed among men and women as young as 35, since it is now common knowledge that heart trouble is a danger to be guarded against as much as possible when one has reached this point in life. This 35-54 age group of approximately 35,000,000 constitutes the theatre industry's greatest revenue potential, while the 17,000,000 or so persons between the ages of 55 to 74 years of age also form an important boxoffice consideration.

As a matter of fact, the 8,500,000 men and women between 60 and 70 make up a sizeable admissions market in themselves. These elderly people generally have more leisure, now that retirement after age 60 is the rule rather than the exception; and have few of the physical exercises available. Time often hangs heavily on the hands of these oldsters, and with the current cycle of nostalgic films this class of business is a "natural" for theatremen who devote special efforts toward attracting this patronage.

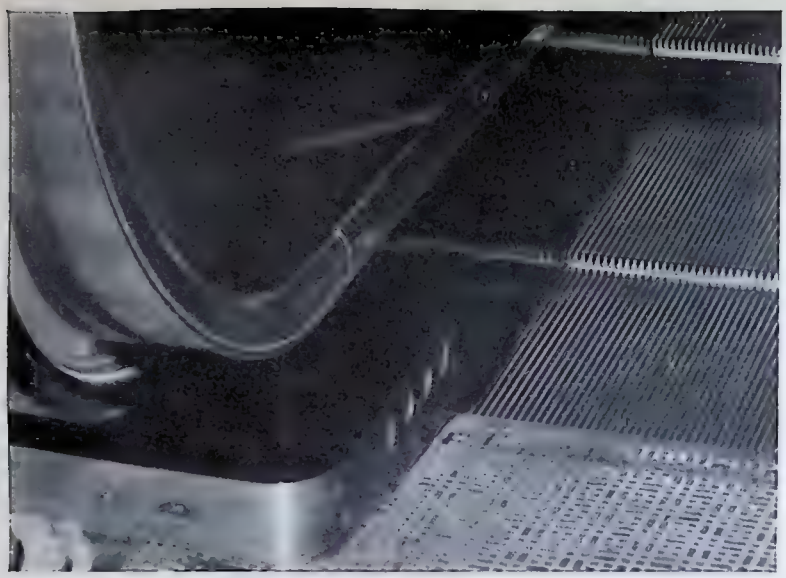
Balcony Comfort and Price

Patron comfort has steadily grown in stature as a theatre consideration, not only for elderly people, but for all those who attend a showplace today. This essential factor calls for relaxing seats, clear projection, good sound, healthful summer air conditioning and winter warmth, hearing aids for the deaf, and a host of other conveniences expressly designed for the patron's enjoyment.

Since it is especially important that patrons over 35 be able to reach their seats easily and without strain on their hearts, the majority of them seek the

"SEATS IN THE BALCONY, WITHOUT WAITING" won't be shrugged off by incoming patrons at the new Calderone, Hempstead, Long Island, when they know that this modern escalator will both deliver them to the balcony level and at the end of the show will reverse its direction and bring them down again.





THE MODERN ESCALATOR is designed for safety and presents few risks to clothing or body. All contact points are smooth and streamlined without screw heads. Moving parts are recessed and pinch-proof.

convenience of first-floor rather than balcony seating, in order to avoid strenuous stair-climbing. Unfortunately, however, this desire for seating in the main auditorium on the part of such patrons brings up the question of the difference in price between first-floor and balcony seats, and thereby is responsible for less frequent attendance by this group.

Since the end of the prosperous war years, the U. S. moviegoer has become extremely price conscious. Consequently, the difference between a 25-cent admission to the balcony, for example, and a 50-cent ticket to the main floor often means the difference between whether older people will attend regularly or only occasionally. This tendency holds true particularly in the 60-year-and-up age group, for the pension on which the average elderly man or woman has retired is generally small and must be stretched to the utmost.

Nonetheless, price now is seriously regarded by other age groups as well. In the final analysis, it is safe to conjecture that a patron will attend a theatre three times when the price is 25 cents, whereas he may attend only once, or not at all, if the price is 50 cents. Since, however, it is financially impossible for many houses to cut first-floor seating prices to any appreciable degree, the balcony is the most practical answer to the price question.

THERE IS ADVERTISING VALUE in this patron service, as can be attested by Ed Enke, manager of the new $2,000,000 Calderone, here seen showing the many modern features of the theatre to a local family.



Making the Balcony Pay

The principal reason why balconies in many theatres show vast expanses of empty seats lies in the natural human dislike of climbing stairs. This factor, as has been pointed out above, is particularly distasteful to older patrons subject to heart strain.

This stair-climbing drawback to increased balcony patronage can, however, be overcome with the installation of a moving stairway. Contrary to popular belief, the cost of such equipment is not too prohibitive for theatre installation. The Otis Elevator Company, for example, has developed a new small escalator that will pay for itself if it increases business volume as little as approximately nine dollars a day.

Elevators have been tried in an effort to conquer the stair-climbing problem, but on the whole they have proven unsatisfactory due to the spacing of peak loads. Many theatre architects and owners are, therefore, turning to the escalator as a better means of quickly and effectively transporting patrons to the balcony. The new 2,500-seat Calderone, Hempstead, Long Island, N. Y., for example, recently installed a moving stairway which operates between the foyer and mezzanine floor leading into the balcony and loges. The escalator is arranged for two-way operation to carry patrons up when traffic is heaviest in that direction, and it is reversed to carry them down at show-break time.

The escalator is built and installed as a packaged unit with the driving machine built into the steel truss. This design eliminates a great deal of structural work and effects a notable reduction in installation costs. The figure of approximately nine dollars increased daily profit with which the escalator pays for itself is based on the cost of the equipment amortized over 33 years, and includes liability insurance, interest on the unamortized investment, upkeep, maintenance, power consumption, and all required items for one unit.

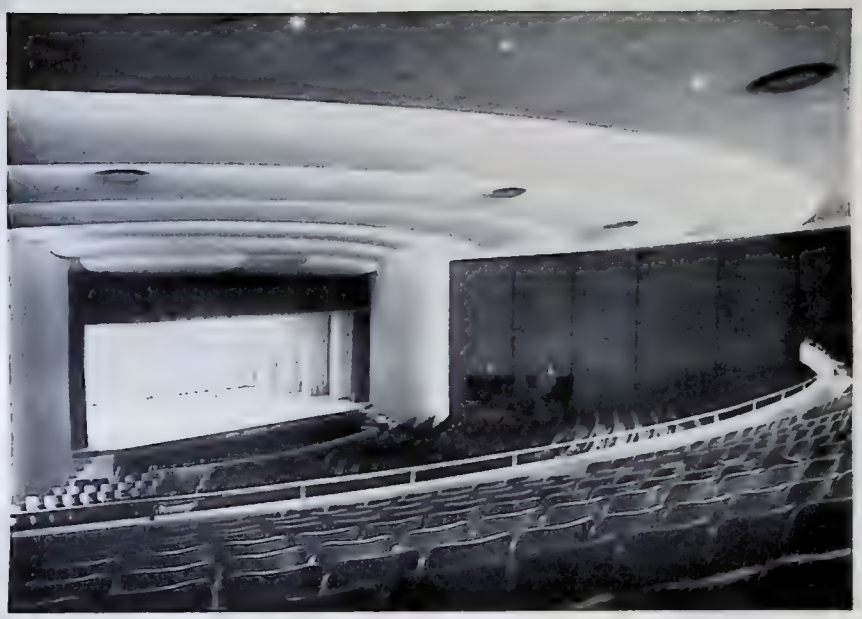
Conclusion

Since a complete fill of the balcony at least once a day is as much to be desired as a complete fill of the main floor, concentration on boosting its patronage more than deserves the attention of every theatre operator. An escalator installation seems to be a logical answer to the problem of persuading patrons, particularly older ones, to use it.

By making it as convenient to reach as the main floor, the balcony can become an excellent paying proposition. It should, of course, be kept in spotless order and well-policed so that patrons will not feel that a lower price naturally subjects them to inferior conditions. Ushers stationed in the balcony should be as attentive and helpful as those elsewhere, and the theatre management should merchandise it effectively so that it will draw patrons in large numbers. Since the seats are there, they should be sold, not once, but several times a day.

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Knoxville Scenic Studios
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HARBOR THEATRE
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David Supowitz, *Architect—Philadelphia, Pa.*
Shander Berger, *Associate*

View of Auditorium: Entirely tufted, covered with light blue Velour, finished with rope moldings. Built proscenium picture frame covered with same light blue Velour. Screen curtains, auditorium drapes, lipstick red taffeta.

CONSTANTINE J. BASIL, *president, Basil Enterprises, Inc., Buffalo, (10 theatres)*—
"It has been our pleasure to know and deal with you for a good many years, and at this time would like to say we have always been very satisfied with your treatments in design of fabrics and paintings."

ROBERT J. MURPHY, *20th Century Theatre, Buffalo*—
"We at 20th Century sincerely believe Novelty Scenic Studios is deserving of all the compliments bestowed upon the company. We are happy to say in the years that the company has been catering to our needs that its work has been of the finest."

A. O. BUDINA, *architect, Neighborhood Theatre, Inc., Richmond, Va. (34 theatres)*—
"We are happy to say that Novelty Scenic Studios has been doing work for Neighborhood Theatre, Inc., ever since the founding of this company some 20 years ago. Its services and materials have been highly satisfactory."

B. E. NELSON, *Nelson Theatre, Mount Jackson, Va.*—
"Novelty Scenic Studios' technical knowledge in the theatre line of work has been of great benefit to me."

EDWIN J. RICKER, *manager, Famous Ballroom, Baltimore, Md.*
"The interior decorations of the Famous Ballroom, designed by Novelty Scenic Studios, have received many favorable comments from patrons, who have acclaimed it as America's most lavishly beautiful dance center

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"Novelty Scenic Studios served us in the making and installation of draperies on many of our building projects, and we like their workmanship, their courteous attention to our requirements, and their ability to meet time schedules. It gives us pleasure to recommend their services."

GEORGE A. EBELING, *architect, Cleveland*—
"The organization has earned an enviable reputation in its line of work for its skill, dependability, and fair dealing."

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"We are extremely well pleased with the technical counsel and excellent cooperation we have received from Novelty Scenic Studios in the past."

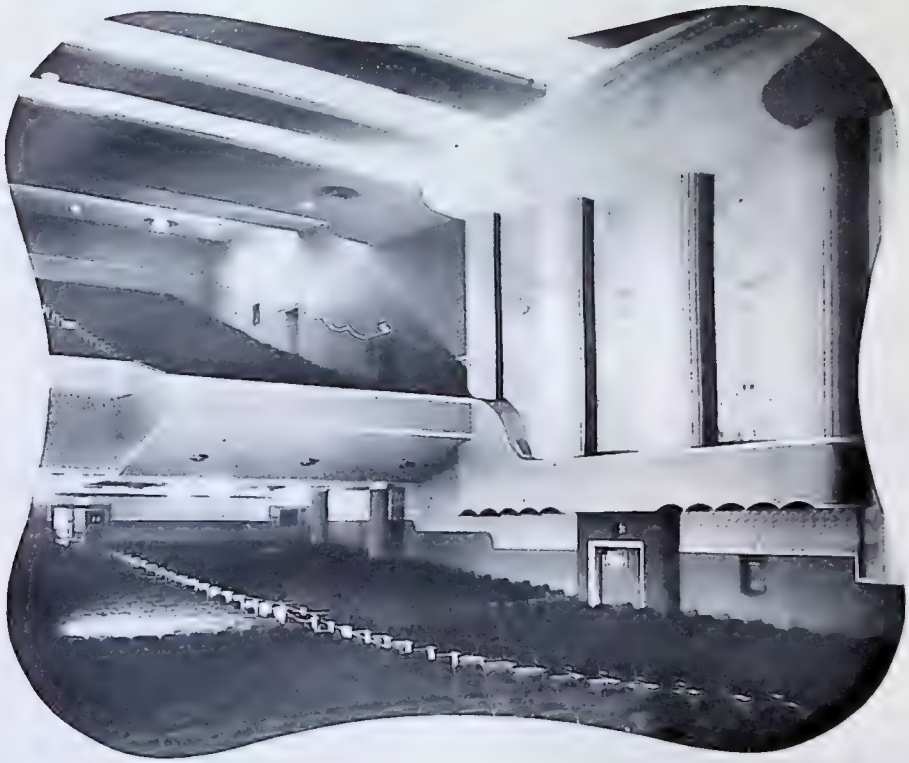
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ORFEON THEATRE
Mexico City, Mexico

John & Drew Eberson, *Architects*
New York City

Color scheme of stage and auditorium walls of torquoise, red, woodrose, silver and gold. Damasks, plushes and antique satins used.

Neighborhood Theatre Ct., *Richmond, Va.*
Wiseland & Lewis Ct., *Atlantic City, N. J.*
University of Wisconsin, *Madison, Wis.*
Franklin D. Roosevelt Library, *Hyde Park, N. Y.*
Convention Hall, *Atlantic City, N. J.*
Public Auditorium, *Cleveland, Ohio*
Civic Auditorium, *Kalamazoo, Michigan*
Nathan Yamins Ct., *Fall River, Mass.*
Wisper & Weisman Theatres, *Detroit, Mich.*
Shea's Buffalo Theatres, *Buffalo, N. Y.*
Randforce Amusement Co., *New York, N. Y.*
Brandt Circuit, *New York, N. Y.*
Weinstock Circuit, *New York, N. Y.*
Morris Mechanic Theatres, *Baltimore, Md.*
Keith-Albee Theatres, *Huntington, West Va.*
Community Circuit, *Cleveland, Ohio*
Associated Theatres, *Cleveland, Ohio*
Scoville, Essic & Reif Ct., *Cleveland, Ohio*
A. M. Ellis Circuit, *Philadelphia, Pa.*
Dipson Theatres, *Buffalo, N. Y.*
Basil Theatres, *Buffalo, N. Y.*
Orfeon Theatre, *Mexico City, Mex.*
His Majesty's Theatre, *Johannesburg, So. Africa*
Skouras Theatres, *New York, N. Y.*
Famous Players Canadian Corp., *Toronto, Canada*
20th Century Theatre, *Buffalo, N. Y.*
Strand and Cathedral Theatres, *Niagara Falls, N. Y.*
Park Theatre, *Tampa, Fla.*
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Shown here is part of the foyer along with the auditorium of CITY LINE CENTER THEATRE, Philadelphia, Pa., designed by WILLIAM H. LEE, ARCHITECT, decorated by DAVID E. BRODSKY ASSOCIATES and called "America's Most Beautiful Theatre" by the owners, Fried Theatre Management Company.



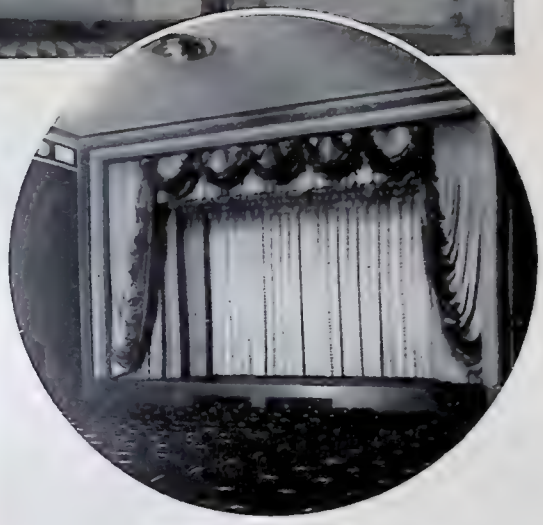
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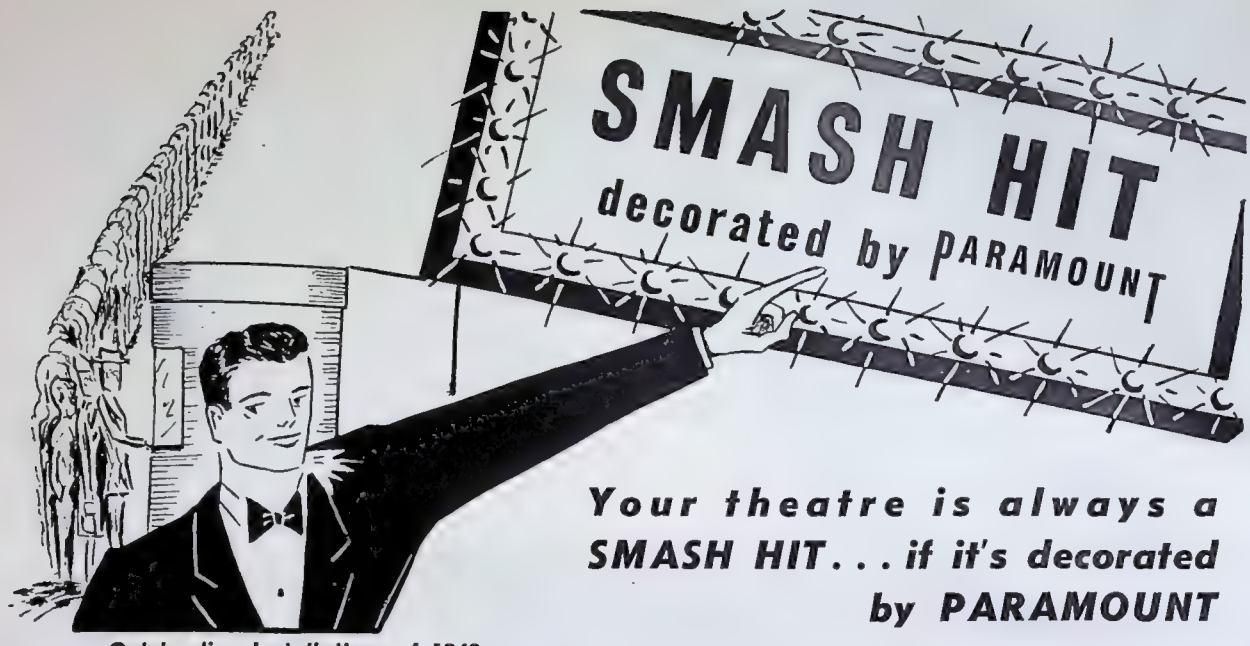
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Varsity Theatre Athens, Ohio	Center Theatre Marion, Virginia
Andolus Theatre Cincinnati, Ohio	The Salt Theatre Saltville, Virginia

KNOXVILLE Scenic Studios INC.

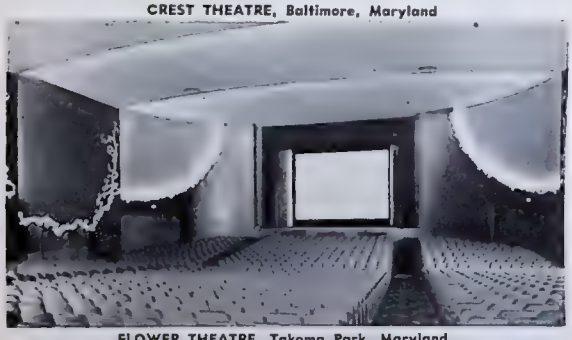
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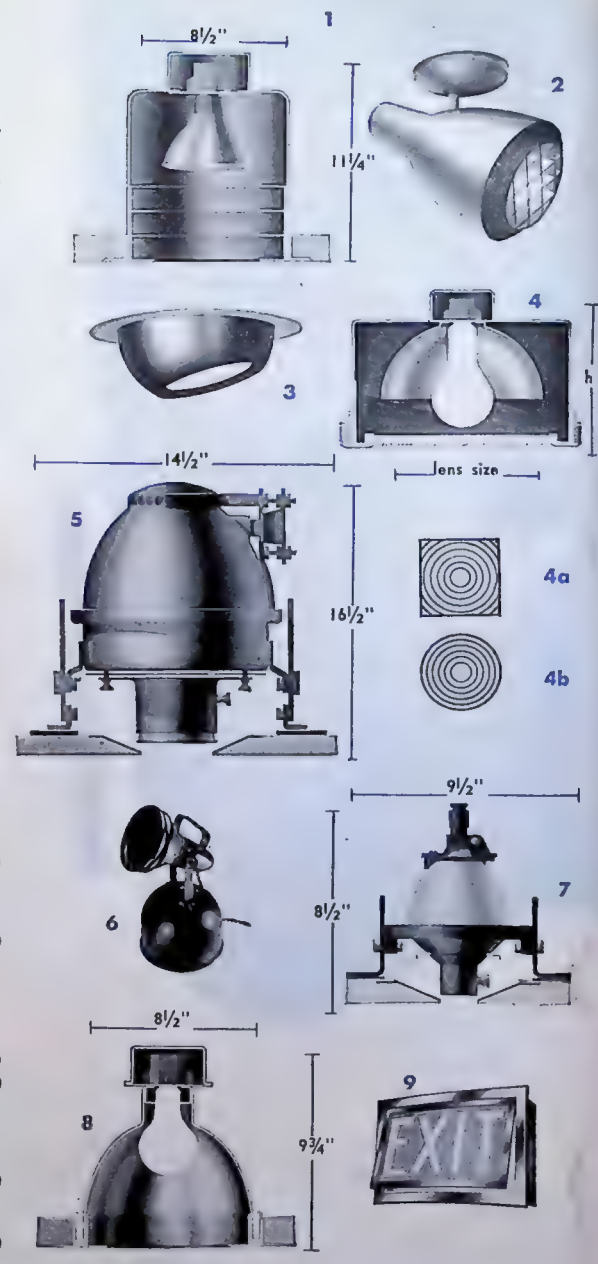
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1 BAFFLE DOWNLIGHT* Recessed in ceiling with flush ceiling plate. Internal baffles create low fixture brightness and give 45 degree cut-off. With efficient PAR-38 or R-40 flood lamp.	388	$20.00
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No. 948 egg-crate louvre	extra	3.00
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	12 inch	11¼"	300-500	2220	24.50
4b circular lens	3 inch	6½"	60	2203	13.20
	6 inch	8⅜"	60-100	2201	14.50
	8 inch	8¾"	100-150	2202	19.70
	10 inch	10⅛"	150-200	2210	22.00
	12 inch	10¼"	100-300	2212	26.50
	14 inch	11¼"	200-300	2214	30.80

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Bottom access type with flush plate.	1663	46.00
8 REFLECTOR DOWNLIGHT* Uses economical 75 or 100 watt general service lamp in alzak aluminum reflector to get maximum light within a 90 degree cone. Low brightness from angles of less than 45 degrees. Recessed, with flush ceiling plate.	932	19.50
9 EXIT LIGHT Recessed fixture with brushed chrome or bronze finish frame, ruby glass sign. 19¼" x 13½" over-all. 8" letters.	2297	26.50

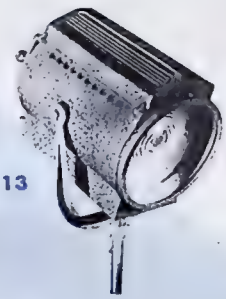
(Lamp bulbs not included unless otherwise stated)




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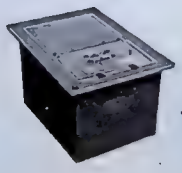
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16

		CAT. No.	LIST
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	Twelve 60 watt outlets	**816**	**$80.00**
	Nine 75 to 150 watt outlets	**817**	**85.00**
11 BORDERLIGHTS Individual reflector types with aluminum alzak finish reflectors. Red, amber, green, white or blue heat resistant roundels. Complete with chain hangers and splice box.			
Outlet Centers	**Wattage**		
6 inch	75-150	450	price on
8 inch	200	455	appli-
12 inch	300-500	460	cation
12 LEKOLITES* Highly efficient alzak reflector spotlights. With 4-way beam framing shutters, yoke and base or clamp; metal color frame; heat resisting condensing lens; and asbestos lead. Iris shutter can be substituted for 4-way framing shutter.			
Lens Diam.	**Wattage**		
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8 inch	250-500-750	1575	75.00
6 inch	250-500-750	1591	55.00
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Lens Diam.	**Wattage**		
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8 inch	1000-1500	506	54.00
10 inch	2000	510	75.00
14 inch	5000	514	120.00
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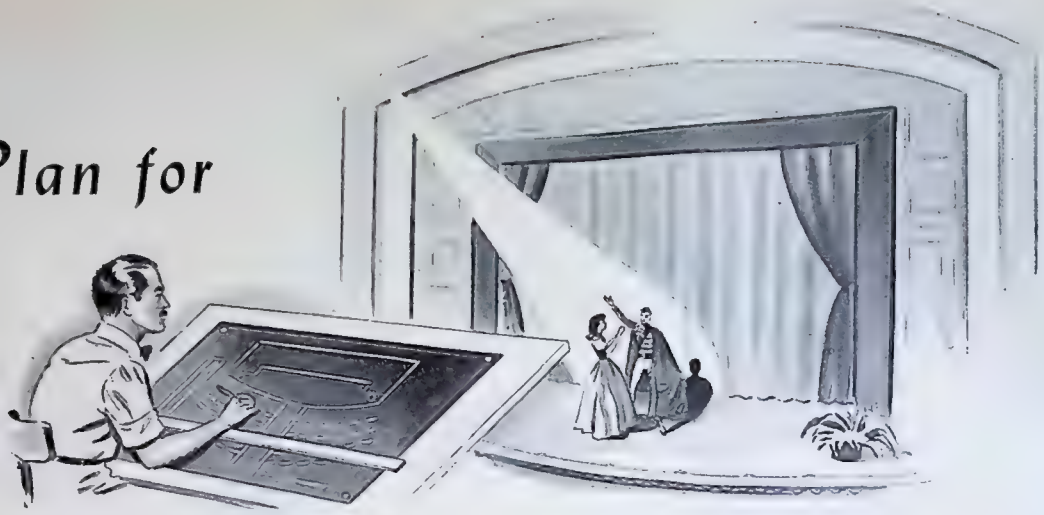
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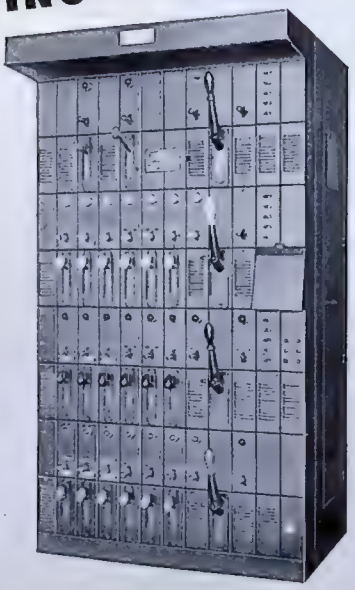
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MAKE YOUR THEATRE LIGHTING *Extraordinary* WITH POWERSTAT LIGHT DIMMING EQUIPMENT

Yes — POWERSTAT Light Dimming Equipment can lift your lighting installation out of the "ordinary" class; can make your lighting work for you — to give you maximum performance at all times.

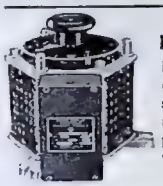
When you can dim, brighten and blend your house, proscenium, lobby and stage lighting, you add to the system the flexibility it needs to make more money for you. You'll get added use, for instance, as an "off hour" place of assembly for a wide range of community affairs — charity drives, rallies, lodges, clubs and other organizations will use your theatre when it's equipped with POWERSTAT Light Dimming Equipment to meet each of their varied needs.

POWERSTAT Light Dimming Equipment is economical to install — in new or old building. Its cool, efficient, power-saving operation will cost you much less than ordinary dimming equipment. It handles incandescent and cold cathode lighting with equal ease and efficiency — *steplessly* dimming, brightening or blending either, from full-on to blackout . . . *smoothly*, to contribute effectively to patron comfort and safety. It will pay you to investigate POWERSTAT Light Dimming Equipment for your theatre — whether you're remodeling, renovating or building a new plant.



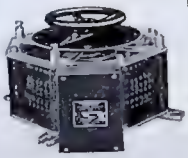
POWERSTAT Dimmer D1000H

is the only unit of its size with a vertically-operated handle and graduated drum markings. It is compact — 7" x 8½" — can be mounted in existing switchboards or control panels to handle single circuits rated up to 1000 watts.



POWERSTAT Dimmer D2000

is hand-operated, non-interlocking, to control lighting installations where single circuit dimming is required. It's rated at 120 volts, 50/60 cycle, single phase; has an output of 0 to 2000 watts.



POWERSTAT Dimmer D5000

is a heavy duty, hand-operated unit. It's rated at 115 volts, 50/60 cycle, with an output of 0 to 5000 watts. For multi-circuit control or for ratings up to 30,000 watts output, this unit can be mounted in tandem or "ganged" in assemblies of three dimmers, operating from a common control shaft.



POWERSTAT Dimmer DM5000

is a motor-driven adaptation of D5000. It can be operated by pushbutton or positioner — from one or several remotely-located stations. It's rated the same as D5000; has the added advantages of pushbutton dimming outlined below.



POWERSTAT Dimmer DBP3-2000

is a handy "packaged" model. It's a 3-circuit unit, each dimmer having an output of 0 to 2000 watts. Each can be operated independently or can be interlocked to a master control for group operation. It's easy to install, easy to operate and can be moved from one location to another for maximum flexibility.



POWERSTAT Dimmer DBR6-1000

is a "package" consisting of six 0-to-1000-watt non-interlocking dimmers in one compact case, each protected by a separate fuse; with individual "off-on" switches, indicating lights and output receptacles. Gives "big switchboard" performance in a portable, "packaged" unit.

POWERSTAT *Motor-Driven* DIMMERS FOR YOUR CONVENIENCE

The push of a button or the flick of a switch can control your house, stage or lobby lighting — from one or any of several remotely-located stations in your theatre. Motor drive adds convenience to your POWERSTAT Dimming Equipment — gives it *extra* efficiency and flexibility. Manager, projectionist, head usher or other official can brighten or dim houselights or other circuits — instantly and easily, from blackout to full-on, when motor-driven POWERSTAT Dimmers are installed in your theatre.

ALL POWERSTAT DIMMERS GIVE YOU THESE *Extraordinary* FEATURES

Control of any number of lamps up to rated capacity. One, two or any number of lamps operated without affecting brilliancy of individual lamps or entire lamp load • Blackout to full-on achieved regardless of number of lamps in circuit • Cool operation • No wasted wattage • Simple installation and operation.



This booklet contains information that will help you choose the type and size POWERSTAT Dimmer for your theatre. Write for a free copy today. 8100 Demers Avenue, Bristol, Connecticut

THE SUPERIOR ELECTRIC CO.
BRISTOL, CONNECTICUT

POWERSTAT VARIABLE TRANSFORMERS • VOLTBOX A-C POWER SUPPLIES • STABILINE VOLTAGE REGULATORS

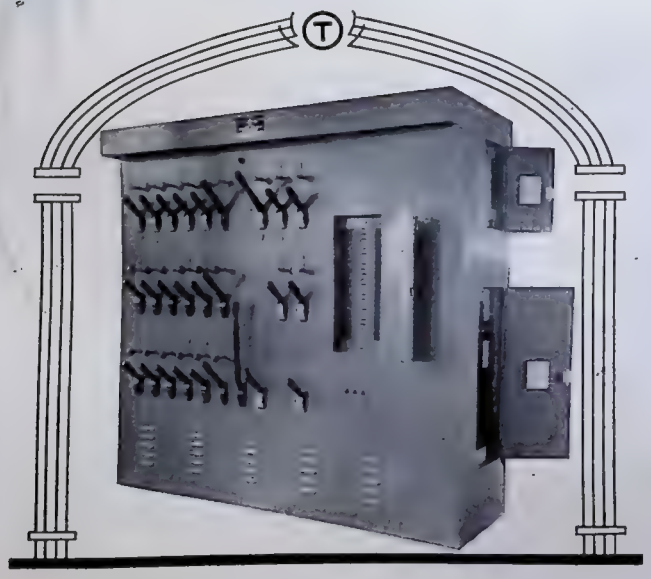
BALANCED LIGHTING EFFECTS

with Trumbull's **Controlite**

—a combined switchboard and dimmer bank



Desk type pilot board operates, by remote control, larger main switchboard placed elsewhere where there is more room. Board shown employs electronic control dimming.



Autrastat Controlite comprises dimmer, switches, circuit protection equipment, completely interconnected with all internal wiring in place, needing only connection to branch circuit terminals and main feeder lugs.

Economical operation. No heat dissipation with improved Autrastat dimmer control, which *varies voltage* by transformer action, instead of inserting resistance . . . saves on power consumption.

Ease of control. Dim lights individually or in combinations. Fingertip control switches make the set-up quickly. Can pre-set lights to set up scene in advance on Controlite board. (Pre-set type.)

Compact design. Switching, dimming and circuit protection equipment all in one compact enclosure.

Flexible arrangement. Controlite is made to customer's specification—big or small, simple or complex.

Three types. Resistance—resistance dimmer plates. Autrastat—auto-transformer type. Electronic—saturable reactors (incorporates pre-set dimming).

Uses. Auditoriums, theatres, churches, schools, lodges, clubs, show windows, fountains, stadiums.

Top-notch engineering. Benefit from the complete engineering service of one of the largest suppliers of lighting equipment.

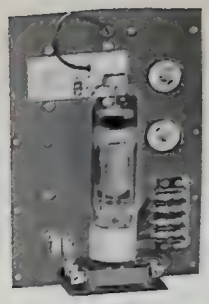
For more information, contact nearest Trumbull office or distributor.



TRUMBULL ELECTRIC

Plainville, Connecticut

theatre dimmers



NEW HYSTERSET REACTANCE DIMMER

FAST RESPONSE • SIMPLIFIED DESIGN • MINIMUM MAINTENANCE

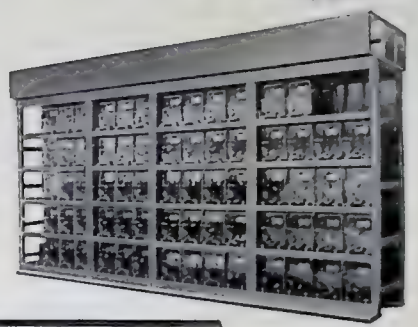
A reactance dimmer installation with the new Hysterset electronic control unit provides the ideal control system for a modern theatre regardless of size.

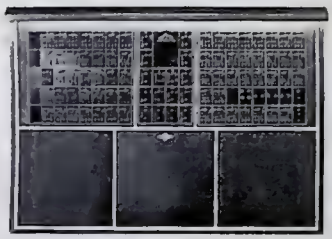
New electronic circuits in Ward Leonard's Hysterset unit for control of reactance-type dimmers give theatres improved lighting control. Response to the movement of the miniature pilot control device is instantaneous to give quick blackouts or immediate brightening. The simplified circuit eliminates extra wiring on installation and reduces the size of the Hysterset Reactor assembly.

All the desirable features of the Hysterset electronic control system are retained in this new design:

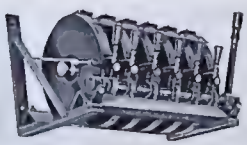
- Miniature pilot controls, operating at low voltage and low current, permitting many circuits to be controlled from a small board.
- Preset control permitting pre-selection of two or more lighting combinations or scenes in advance.
- Proportional dimming control through group masters and grand masters plus fading control from a single operating lever to transfer from preset to preset.
- One rectifier tube per circuit for minimum maintenance cost.
- Wide range of dimming control. Standard design suitable for 100% to 20% dimmer rating.
- High efficiency which eliminates need for artificial ventilation unless large capacity loads are controlled by reactance units located in a small room.

Ward Leonard's engineering department will be glad to furnish recommendations or specifications. Send complete information about your installation problem.







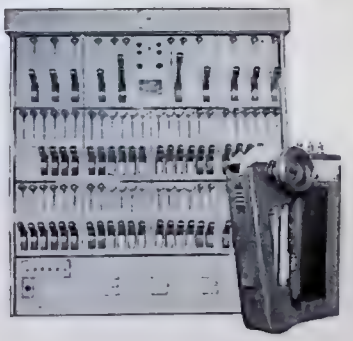


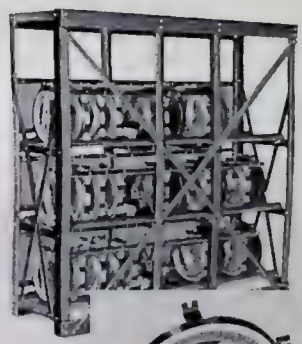




RESISTANCE DIMMERS

Inexpensive assemblies of resistance dimmers for small theatres and schools provide low-cost, flickerless dimming.







AUTRASTAT DIMMERS

Assemblies of Autrastat dimmers for manual operation provide high efficiency and wide range of load characteristics. Large capacity Autrastat dimmers available in single units.

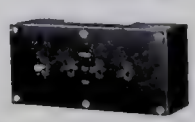
WARD LEONARD

Result-Engineered Controls

WARD LEONARD ELECTRIC COMPANY

86 South Street, Mount Vernon, N. Y. Offices in all principal cities of U. S. and Canada.

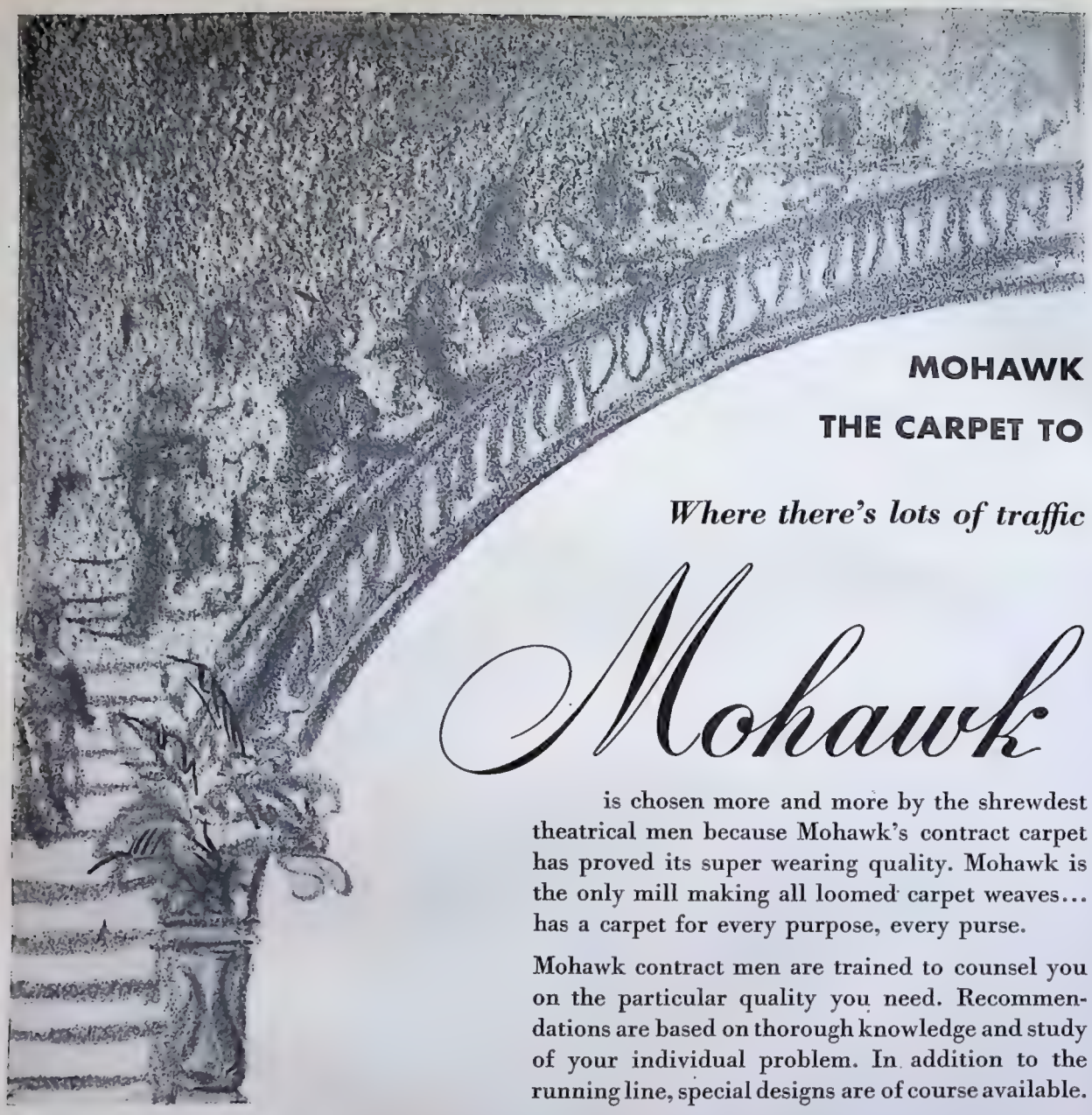
Relays • Resistors • Rheostats • Control Devices





REMOTE CONTOL

Remote operation of resistance or Autrastat dimmers with Motorlite or Regulite control systems are excellent for installations requiring control from projection booths.



MOHAWK

THE CARPET TO

Where there's lots of traffic

Mohawk

is chosen more and more by the shrewdest theatrical men because Mohawk's contract carpet has proved its super wearing quality. Mohawk is the only mill making all loomed carpet weaves... has a carpet for every purpose, every purse.

Mohawk contract men are trained to counsel you on the particular quality you need. Recommendations are based on thorough knowledge and study of your individual problem. In addition to the running line, special designs are of course available.

Imperial, MI-11
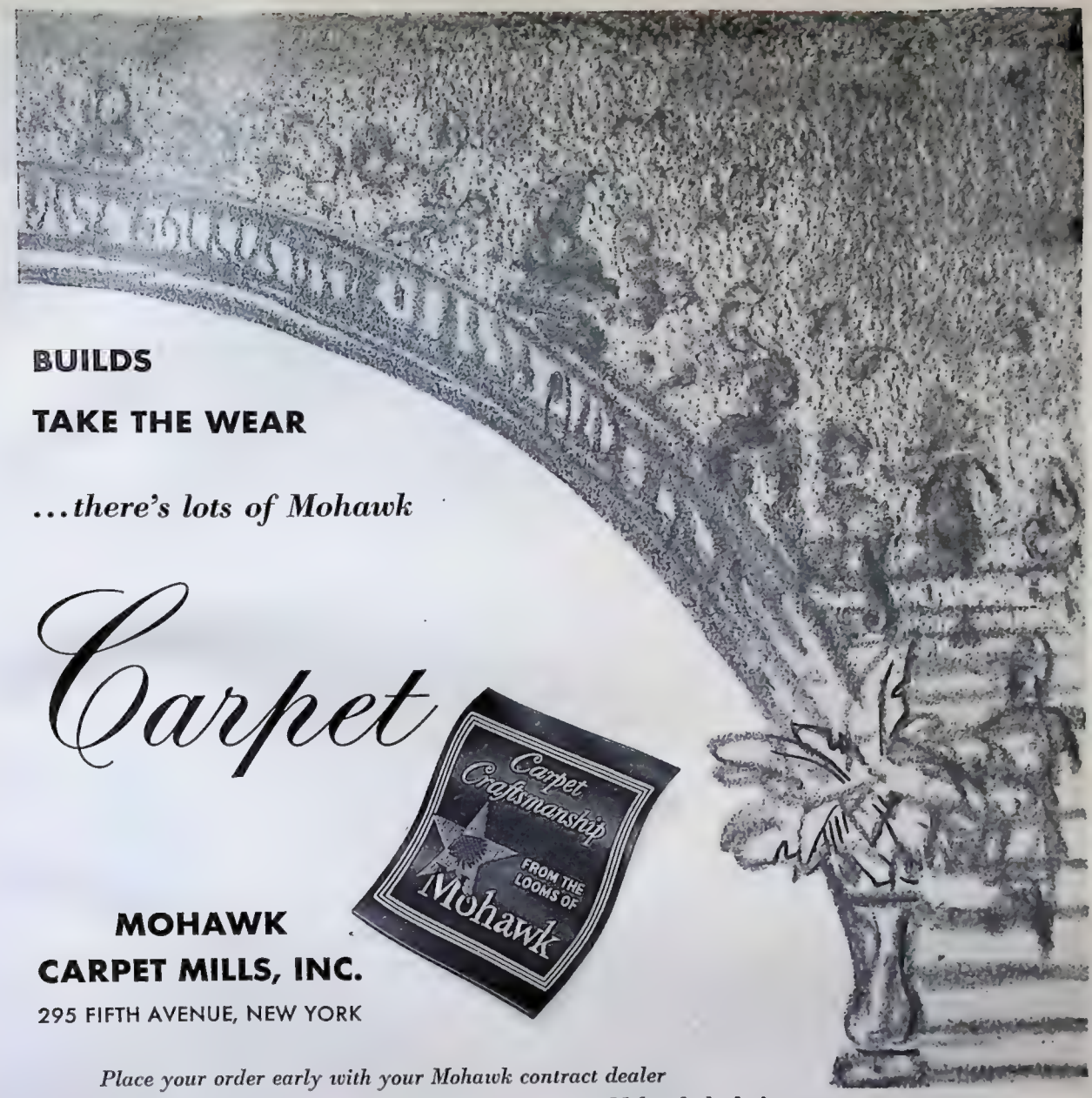


Saratoga, SA-32



Saratoga, SA-46





BUILDS

TAKE THE WEAR

...there's lots of Mohawk

Carpet

Carpet Craftsmanship FROM THE LOOMS OF Mohawk

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CARPET MILLS, INC.
295 FIFTH AVENUE, NEW YORK

Place your order early with your Mohawk contract dealer or write us for nearest Mohawk dealer's name.

Braeside, BR-15



Saxony, MS-109



Lobby, W-321-10

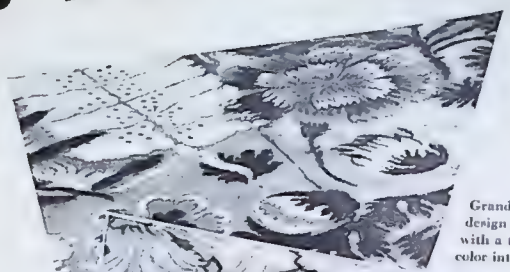


HOW TO step up business

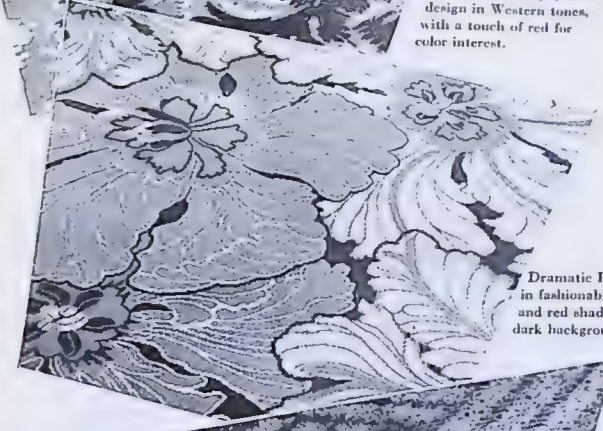
Footsteps through your lobby mean business for your theatre. And a charming lobby, carpeted in style, invites more patrons, steps up *your* business!

That's why Gulistan quality carpet for your theatre is a sound investment—for today and for the years to come. For a beautifully decorated theatre not only *attracts* customers, but keeps them *coming back.* Thus a beautiful carpet—your first step to style in theatre decoration—can be your first step to better business.

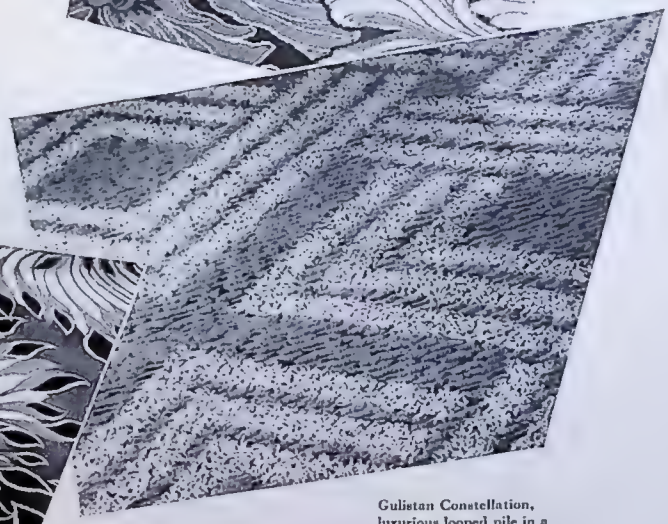
Your supplier now has the best selection of Gulistan carpets in years . . . long-lasting, high-style carpets in new weaves, new patterns, new colors. See him today—he'll help you to keep *your* business stepped up to its peak!



Grand Canyon, popular design in Western tones, with a touch of red for color interest.



Dramatic Petal design in fashionable brown and red shades on a dark background.



Gulistan Constellation, luxurious looped pile in a distinctive, geometric pattern.



Persian Sunburst, a fascinating Gulistan design in rich, glowing colors.

GULISTAN *Carpets*

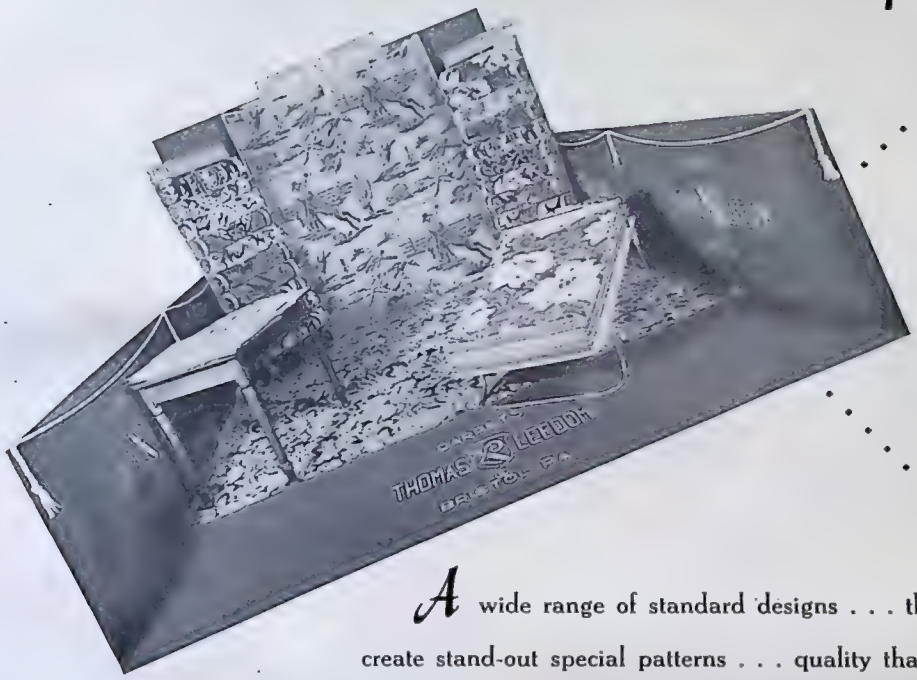
REG. U.S. PAT. OFF.

SINCE 1905

WOVEN ON POWER LOOMS IN THE U. S. A. • A. & M. KARAGHEUSIAN, INC., 295 FIFTH AVENUE, NEW YORK 16, N. Y.

Theatre Owners Everywhere have learned.....

It Pays To Ask Your Contractor about LEEDOM Carpeting



Leedom exhibit at 1949 Tesma-Teda Convention, Chicago, Ill.

A wide range of standard designs . . . the ability to create stand-out special patterns . . . quality that challenges comparison and stands up under the abuse of theatre traffic. In short . . . 27" and 36" carpeting to meet your individual needs by a mill known for its versatility, reliability and co-operation.

Always available for consultation, through our contractors.

Permanent displays at all offices below.

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PHILADELPHIA BOSTON



Skouras Calderone Theatre, Hempstead, L. I.

Keith Memorial Theatre, Boston, Mass.



Whether you play to twelve hundred or six thousand, you'll probably admit that today's competitive conditions put your business on the carpet.

Business is on the carpet and carpet is our business

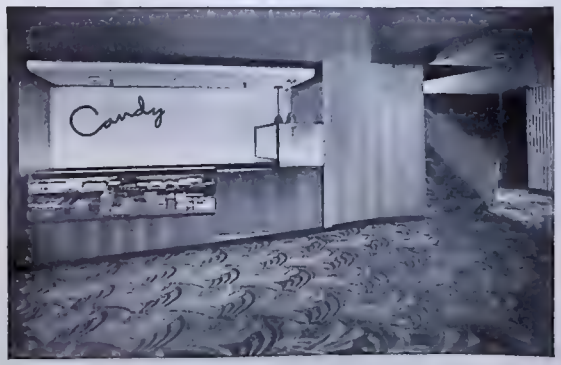
And whether you've been in the theatre business five years or fifty, chances are you're sold on the importance of carpet in your business.

That's why today, when it's more important than ever to keep your best foot forward, we suggest you consult an Alexander Smith-Masland contract carpet specialist.

We at Alexander Smith and C. H. Masland have a tremendous range of carpet weaves, qualities, and colors for you to choose from . . . dozens of unique services to offer you . . . years of experience to help you solve your installation problems quickly and economically.

Let us help you put your business on the best possible footing! Get in touch with one of our contract carpet representatives today!

Strand Theatre, Hartford, Conn.



Alexander Smith
C. H. Masland
CONTRACT CARPETS
295 Fifth Avenue, New York 16, New York



American Bodiform
Retractor 20-128

Unequalled for beauty!

The last word in luxurious comfort!

The new American Bodiform Retractor

☆ *Seat swings back effortlessly*

☆ *Silent, smooth, long-wearing mechanism*

☆ *All moving parts shielded—no hazards*

☆ *Empty seats assume ¾ safety-fold position*

☆ *Amazingly low housekeeping and maintenance costs*

PLUS OTHER FAMOUS AMERICAN BODIFORM ADVANTAGES



American Bodiform Retractor
in fully retracted position

American Seating Company

WORLD'S LEADER IN PUBLIC SEATING

Grand Rapids 2, Michigan • Branch Offices and Distributors in Principal Cities
Manufacturers of Theatre, Church, School, Auditorium, Transportation, Stadium Seating, and Folding Chairs



"Jeepers... imagine Dad sitting through a double feature!"

Even your fussiest patrons will enjoy the show more . . . *if* the seats in your theater are cushioned with Restfoam. That means they'll come back more often. For Restfoam has plenty of box-office appeal.

Restfoam has plenty of appeal for theater owners, too. It's your best bet for long service with low maintenance cost. And it makes upholstery fabrics last and last. In fact, it's a *four-star* attraction:

★ **Gives greater comfort!** No lumps! No bumps! Patrons enjoy the firm, *natural* support of Restfoam.

★ **Cool and clean!** Restfoam is self-ventilated by millions of tiny, interlaced air cells. It is 100% pure natural latex foam. And it contains no dust-making materials.

★ **Keeps its shape!** Nothing to shift or slide. Nothing to pack or mat down. No broken wires to pop out. No wonder you get longer and safer service from Restfoam.

★ **Cuts upkeep costs!** Restfoam relieves strain on covering materials. Your fabric stands up better—and longer.

So . . . if *you* want to step attendance up and costs down, find out how Restfoam can help you do it. Specify Restfoam when buying new chairs—for furniture in lobby and rest rooms, too. See your theater architect or supply dealer. Or write for details today.



SEND FOR FREE APPLICATION MANUAL

for reupholstering of theater seats. New Application Manual shows you how easy it is for you to use Restfoam. Profusely illustrated. Send for your copy now! No obligation. Hewitt Restfoam Division, 370 Lexington Ave., New York 17, N. Y., 1230 American Furniture Mart, Chicago 11, Ill.

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EST. 1826

COMFORT Builds Profitable Patronage

THE EXPERIENCE of operators from Coast to Coast shows that Heywood-Wakefield seating builds profitable business. The extra comfort of these handsome chairs makes patrons *want* to come back. Be sure to see the wide range of current models—and learn the many money-saving advantages of Heywood-Wakefield construction. Call your nearest Heywood-Wakefield distributor or one of our sales offices in Baltimore, Boston, Chicago or New York. Heywood-Wakefield, Theatre Seating Division, Menominee, Michigan.



TC 700



TC 701



TC 702



TC 703



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TC 610

MORE **COMFORTABLE**

MORE **BEAUTIFUL**

MORE **SERVICEABLE**



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Chairs

for EVERY **CONDITION**

EVERY **TASTE**

EVERY **BUDGET**

Built to excel—not just to compete—every Ideal chair is an unchallenged value in its price range. Write for free literature on this trouble-free line now.

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in thousands of America's
leading theatres!



KROEHLER *Push-Back* Seats*

proved by years of performance

Here's one star performer that boosts the box office month in and month out! Theatre managers report Kroehler *original* Push-Backs build invaluable good will . . . create word-of-mouth advertising . . . develop real repeat business!

In other words—Push-Back Seats do a powerful public relations job that makes dollars-and-sense at the box office!

Kroehler Push-Back design is built on years of actual field experience, plus a 56-year heritage of fine furniture manufacture for the home. That's why Kroehler construction assures you a seat combining maximum comfort and convenience—a seat that has been copied —but never duplicated!



1—Here's the normal, comfortable lounge-chair position of the Push-Back Theatre Seat.



2—Seated patrons need not stand—a gentle movement of the body slides the seat back.



3—Relax, chair slides back to normal, comfortable position—no standing up, no inconvenience.

WRITE OR WIRE ONE OF THESE KROEHLER PUBLIC SEATING OFFICES TODAY!

666 Lake Shore Drive . . . Chicago 11, Illinois
206 Lexington Avenue . . . New York 16, N. Y.
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*Fully Protected by Patents

KROEHLER *Push-Back* THEATRE SEATS
The World's Finest Theatre Seat

Only 23½ pounds!

A HEAVY DUTY COMMERCIAL CLEANER FOR WET OR DRY PICK-UP

Use this cleaner for:

- Thorough cleaning of all rugs, carpets and runners
- Taking up mop water, shampoo suds, etc.
- Dusting draperies, ornaments and hard-to-reach areas
- Removing coarse dirt and litter, tracked-in gravel and papers



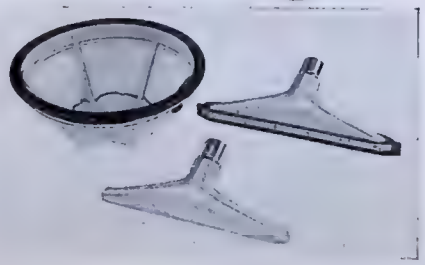
Specifications: Motor—110 volt, universal-type, a-c/d-c • Bearings—ball-type, greased for life • Long Cord—20-ft. heavy-duty, all rubber • Casters—hard rubber, silent • Capacity—large 5 qt., easy to empty container • Weight—23½ lbs. • Dimension—15½" high, 13¼" diameter • Finish—durable, two-tone gray.

Other models available for any commercial or industrial cleaning requirements

Lightweight, powerful, compact, only partially describes the new General Electric commercial vacuum cleaner. For wet or dry pick-up, this vacuum cleaner is truly "heavy-duty" yet light enough for easy operation. Weighs only 23½ lbs. 15½" high x 13¼" in diameter. Rubber cord with plastic plug. Chrome fittings.

For additional information write to General Electric Company, Dept. 22—4601, Bridgeport 2, Connecticut.





Comes complete with tools for dry pick-up. For wet pick-up, accessories shown immediately below cleaner (wet pick-up bag, rubber squeegee for bare floors, metal squeegee for rugs) are offered at small extra cost.

GENERAL ELECTRIC

THEATRE CLEANING is a "BIG PRODUCTION" JOB in which the SUPER plays MANY PARTS



Like actors chosen because of outstanding qualifications, so the Super Theatre Cleaner Special Tools perform the many different specialized jobs necessary to make theatre cleaning easy, economical and completely successful. These specialized tools were designed by Super engineers after a careful study of the cleaning problems in the modern theatre.

Designed, constructed and tool-equipped to do your cleaning job, the Super will cut your maintenance cost in many ways, prolong the life of furnishings, carpets, ornamentation, screen and sound equipment, air conditioning units—EVERYTHING.

The two-bend tube with the swivelled floor tool enables the operator to work rapidly without bending or stooping. Ask your supply dealer or write for complete data. A demonstration will show you why hundreds of leading modern theatres all over the country use Super Theatre Cleaners.



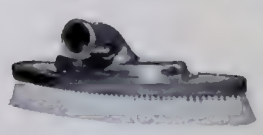
SUPER HI-UP TUBE
Reaches up or down 10 feet plus the reach of the operator. Cleans walls, cornices, box fronts—all high up places, or chutes, shafts, under floor openings. Light weight enables operator to use Hi-up tube without excessive fatigue.



SUPER SPOTLIGHT
Attached to the handle of the cleaner the Super Spotlight casts a strong beam on dark areas under seats and behind stationary equipment. Saves electric bills.



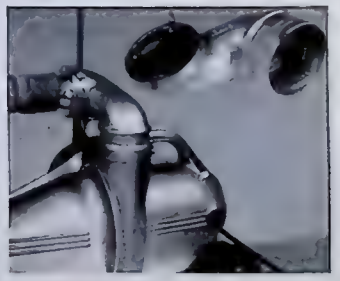
SUPER SAFETY TRAP
The Super picks up jewelry, pins, metal objects and deposits them in the Safety Trap without damage to bag or cleaner. Makes it easy to retrieve objects of value.



SCREEN BRUSH
Made of soft, long hair, the Super Screen Brush keeps screens bright and sound holes free of clogging dirt.



AIR FILTERS
100 air conditioning filters can be cleaned in 15 minutes with the Super. Eliminates costly and frequent removal of units for washing. Helps keep the air in your theatre clean and fresh.



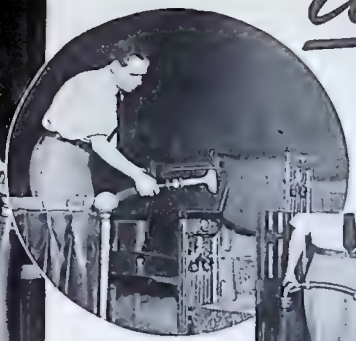
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PROJECTION *and* SOUND

1949-50

Optimum Performance of High-Brightness Carbon Arcs

Results of Tests Using Both Water-Cooled and Air-Cooled Methods are Analysed and Compared

By M. T. Jones and F. T. Bowditch
National Carbon Company
Cleveland, Ohio

BRIEF: ***The effects of positive-crater cooling are described, and a suitable apparatus for this purpose is illustrated . . . The combination of specially made high-brightness carbons with water-cooled operation permits the use of higher currents without unsteadiness, and so gives a higher brightness than has been achieved in conventional air-cooled operation . . . This is attributed to the fact that effective cooling of the positive carbon removes energy which would otherwise be dissipated in turbulent volatilization, so that a higher current density can be achieved in the light-producing gas ball before overload turbulence occurs . . . A considerable part of the more efficient crater cooling is attributable to the carbons themselves, since they will operate without water cooling at higher currents and brightnesses than other types of equal size.***

Within the limit of satisfactory air-cooled operation with a given carbon, efficient water cooling always reduced the light produced at a given current; the ability to operate with higher brightness at higher currents was thus gained at the expense of a lower current efficiency . . . Carbons designed for efficient air-cooled operation gave no better result with water cooling; the current efficiency was sacrificed with no gain in maximum brightness.

The high-intensity carbon arc finds extensive use in the motion picture industry because of several important attributes. First, it has a very high brightness over an area of adequate size and shape. An effective light-collecting system thus can be designed to concentrate the necessary lumens on a projector aperture within the limits of optical speed which can be utilized effectively by the projection lens. Second, the light is of excellent color quality for the faithful photography and projection of both black-and-white and colored motion pictures. Third, the carbon-arc lamp has a high degree of mechanical reliability insuring a constant trouble-free delivery of light during the period required to project one reel, or to photograph a scene.

This first attribute of a continuously maintained high brightness has been the subject of investigation by many scientists both here and abroad. In our own laboratories, we are continually searching for ways of making and operating carbon arcs which will raise the ceiling of brightness, although we, in common with other investigators, have at times held the opinion that certain facts of nature have determined limits beyond which we may never be able to go.

Reprint of a paper presented October 26, 1948, at the Society of Motion Picture Engineers Convention in Washington; Central Section, S.M.P.E., January 13, 1949; and published in the Journal of the S.M.P.E., April, 1949.

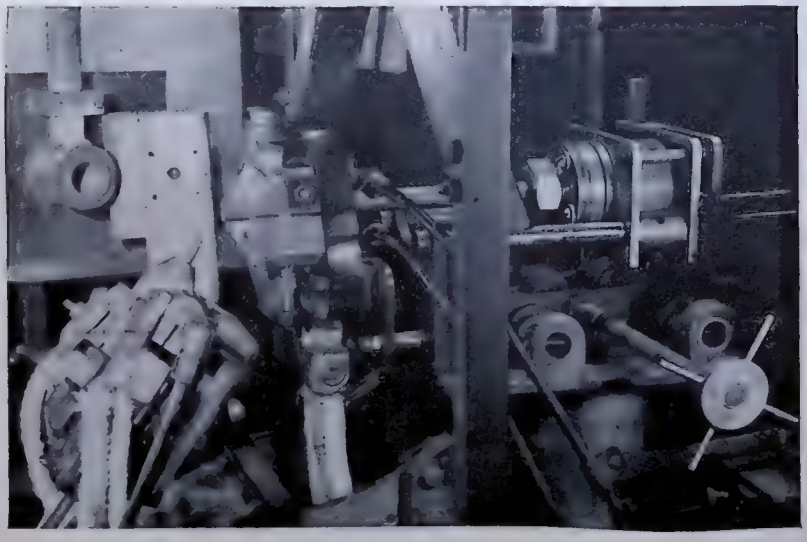
The present paper is concerned with a method of operating carbon arcs which has been found useful whenever the highest brightness and smoothest operation, particularly at high currents, is desired. This involves the use of water-cooled jaws for both the positive and negative carbons. When these jaws are properly employed in a manner to be described, they permit the effective utilization of the high-current densities required for optimum high-brightness performance. Mention has been made in previous publications of the advantages inherent in water-cooled jaw operation.[1, 2] The continued confirmation and extension of these earlier findings has made appropriate this present paper, devoted more particularly to a description of the operating methods involved.

The major source of brightness in the high-intensity carbon arc is the so-called line radiation resulting from energy exchanges between rare-earth atoms and electrons in the gas ball within the positive crater. It is apparent that the higher the current on a given-sized carbon, the higher the electron density in the crater will be. Thus a greater number of energy exchanges is to be expected, with a corresponding increase in crater brightness. However, as the current is increased beyond a rather critical value, an overload phenomenon is encountered, which is usually characterized by noise and unsteadiness. In practical operation, therefore, the user must be content with the brightness obtainable at currents below this overload point. With the present 13.6-mm super high-intensity projector carbon, for instance, the maximum recommended current is 170 amperes.

A theory of overload has been advanced in an earlier publication.[2] Briefly, it is thought to be analogous to the violent boiling of a kettle of water which accompanies a high rate of energy input from a turned-up burner. If, however, a cooling coil be inserted in the kettle (analogous to providing improved cooling of the positive-carbon crater) enough of the input energy can be absorbed so that the boiling will subside, and an even higher rate of energy input tolerated without turbulence.

So it is with the carbon arc. Effective cooling of the positive carbon dissipates peaceably energy which might otherwise produce turbulence, so that a given-sized carbon can be designed to carry more current. Finkelnburg, in an accompanying paper,[3] points out that water-cooled operation is accompanied by a lower anode drop, so that this also contributes importantly to the reduction in anode energy per ampere. By means of optimum cooling, through the use of properly constructed carbons in water-cooled jaws, the gas ball in the crater space can thus be provided with a denser population of electrons before the limit of

FIG. 1—Side view of arc-lamp mechanism incorporating water-cooled positive and negative jaws.



their peaceful absorption on the crater surface is attained. A 13.6-mm size, for instance, can be made to operate at 350 amperes and 40,000 screen lumens, instead of 170 amperes and only 20,000 lumens; while water-cooled 16-mm carbons have been operated at currents up to 500 amperes. It is advantageous also to cool the negative carbon, particularly at high currents, as will be pointed out later.

Other workers have determined certain fundamental relationships characteristic of the carbons and methods of operation with which they were familiar, and which predict levels of operation significantly exceeded by the procedures described here. For instance, Finkelnburg[4] reports an empirical relationship between crater brightness and consumption rate, which he found characteristic of the carbons and methods of operation available to him in Germany. At 2000 millimeters per hour (79 inches per hour) for instance, this relationship predicts an average brightness of 140,000 stilb (1260 candles per square millimeter). As will be shown later, this value has been exceeded by about 50 per cent, taking advantage of the cooling methods described in this paper.

In a second instance,[5] Hallett, in England, recently proposed a so-called "master curve," relating maximum crater brightness to current density. While Hallett and his associates were familiar with the advantages of water-cooled jaw operation, particularly as this affects carbon consumption, no mention is made of the ability, with specially made carbons, to achieve a much higher maximum brightness with water-cooled jaws than with the conventional radiation-cooled contacts. By such means, we have found it possible in many cases to achieve brightnesses significantly in excess of the maximum predicted by the "master curve." It should be pointed out again that this advance is not the result of water-cooled operation alone, since it will be apparent later that carbon design, specially directed toward water cooling, is an even more important factor.

The experimental apparatus in which our tests were made is shown by the succeeding figures. Fig. 1 shows a side view of the arc-lamp mechanism, which is a special adaptation of a general-purpose test lamp made by the Mole-Richardson Company of Hollywood. The water-cooled positive and negative heads, made of silver and copper, respectively, the floating chuck for driving the positive carbon, and the arrangement of the current leads to protect them from the direct radiation of the arc and to insure a symmetrical magnetic field around the arc, are items of particular interest. The floating chuck at the right of the picture grips the positive carbon securely for purposes of rotation and forward feed, while at the same time permitting the end of the carbon to oscillate a bit as demanded by the rigid clamping of the front end. The water-cooling circuit, with a coil spring counteracting the sideways loading which the piping imposes on the upper jaw, is another important feature. This front-end clamping is more clearly seen in Fig. 2, which shows the positive

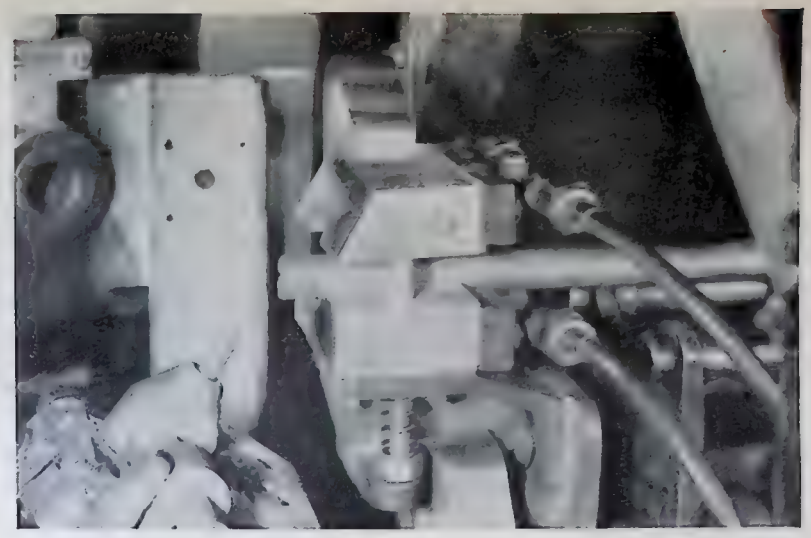
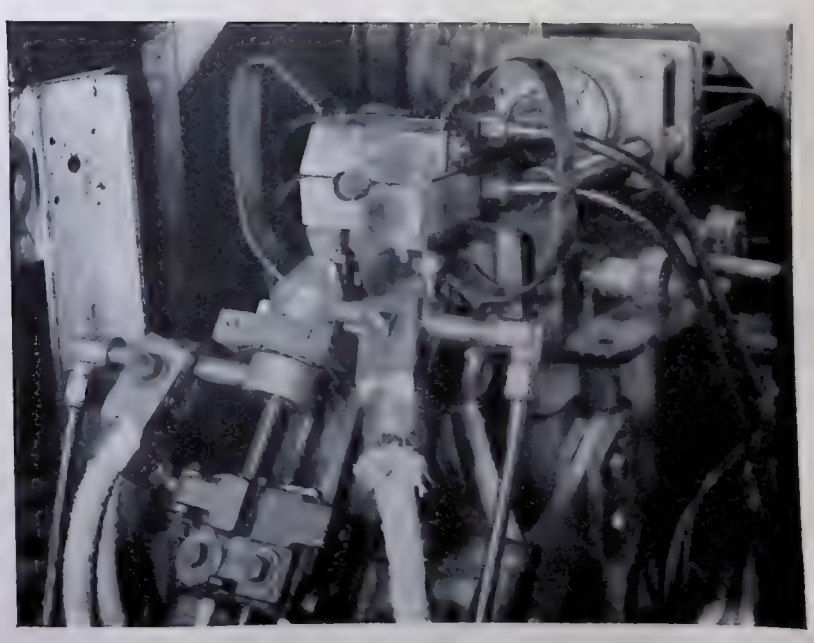


FIG. 2—Detailed view of water-cooled positive jaws.

water-cooled jaws with the near current lead removed, and the upper jaw raised to expose the construction features more clearly. These include a rigidly mounted lower jaw, with the upper jaw free to move vertically under spring pressure. The location of the springs underneath, shielded from the radiation in a counterbored hole in the lower water-cooled jaw, is an important feature. The guides for positive alignment of the upper jaw insure the rigid clamping of the positive carbon along a predetermined axis. The upper jaw is sloped backward along the edge nearest the arc to permit free arc-flame travel at short carbon protrusion with minimum damage to the jaw. Fig. 3 shows a front view of the mechanism with all connections, and both positive and negative carbons, in place. Special attention is directed to the negative head, which consists simply of a fixed-bore water-jacketed copper tube. An unplated negative carbon of small diameter ($\frac{5}{16}$ inch) is employed, with a short protrusion. Current is conducted directly from this water-cooled negative head, so that the carbon carries current only along the short protrusion.

The choice of silver material for the positive head and copper for the negative is based upon the following considerations. A material for this service must combine a high electrical and thermal

FIG. 3—Front view of arc-lamp mechanism.



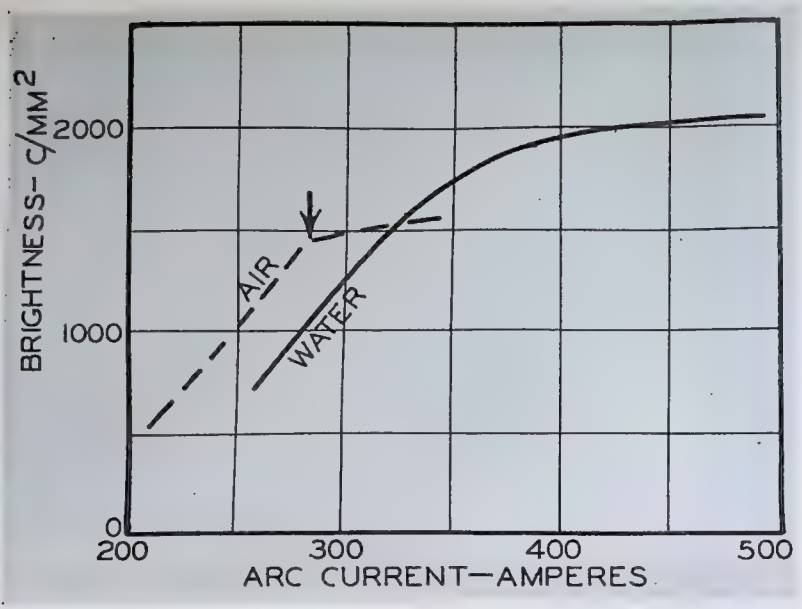
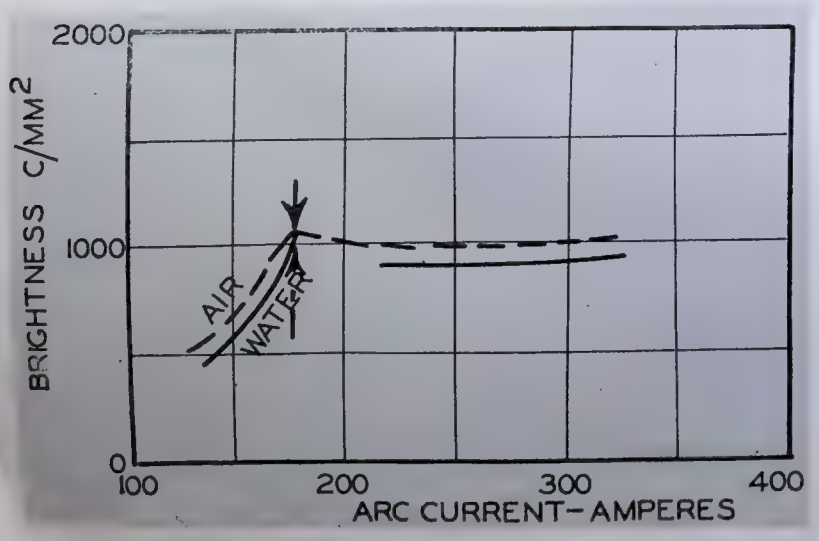


FIG. 4
Comparison of air- and water-cooled operation for new higher-current 13.6-mm "high-brightness" carbon.

conductivity with freedom from excessive corrosion and rapid wear in service. Copper most economically fulfills these requirements in so far as the negative head is concerned. However, this same material fails because of excessive wear in the positive head. This is because copper is plated from the jaws onto the carbon, and this then scores the jaws as it is dragged around with carbon rotation. The reason this destructive effect is confined to the positive jaw, while the very similar usage in the negative gives no trouble, is believed to be associated with the direction of current flow, and the rectifying action of the copper-oxide and sulfide films which tend to form along the copper-carbon contacts. These films are conductive in the direction of current flow from carbon to copper in the negative holder, but they tend to block current flow from copper to carbon in the positive. Since the distance between the jaw and the carbon is so short, a contact drop of only 1 volt produces a gradient of perhaps several thousand volts per millimeter across the rectifying film. This is sufficient to rupture the film and draw copper ions across the gap to be neutralized on the carbon. Silver oxide and sulfide, on the other hand, are good conductors with no rectifying properties, and so silver is free from this difficulty. The jaws illustrated here have operated several hundreds of hours, many of them at high currents from 300 to 500 amperes, with no significant wear and every indication of prolonged satisfactory performance.

FIG. 5
Comparison of air- and water-cooled operation for 13.6-mm super high-intensity, projector carbon.



For purposes of securing comparative data, it is necessary that certain operating conditions be held constant. Factors determining the choice of these conditions in the tests to be described were as follows:

The speed of rotation of the positive carbon was chosen at 15 revolutions per minute. However, the exact speed is not critical, so long as it is above the minimum required to insure a straight crater face. In the test lamp used, the angle between the positive and negative carbon is adjustable over a wide range. This angle is not ordinarily critical over a range between about 45 and 60 degrees of the negative-carbon axis below a horizontal positive. For the tests to be described, the halfway value of 53 degrees was chosen. At shallower angles, the positive tail flame is thrown objectionably close to the upper jaw, the arc is less stable, and it is more difficult to hold a straight crater. At steeper angles, the negative flame tends to pass in front of (rather than into) the crater, so that the arc is more difficult to control, at least without the aid of an auxiliary magnetic field.

In order to insure optimum cooling, the protrusion of the positive carbon beyond the jaw should be held to as small a value as possible consistent with adequate jaw protection. A protrusion of ½ inch was used with 16-mm carbons and only ¼ inch with 9-mm carbons.

The use of a small negative carbon with a short protrusion contributes importantly to a stable arc at high currents. The small carbon spindles to a sharply defined tip area, which is completely and stably filled with the negative flame at a current density of approximately 30 amperes per square millimeter. (This compares with a positive-crater current density of between 1 and 3 amperes per square millimeter.) It is obvious that there is much less freedom for arc wandering here as compared with the comparatively blunt point formed on the much larger plated negatives conventionally employed in heavy-current service. The advantages of the small water-cooled negative are more pronounced as the current is increased.

The determination of the maximum performance of a given carbon is dependent upon the choice of a maximum operating current. This was chosen at a value a little below that which resulted in unstable operation. Over a wide range of sizes and types of positive carbons, the same 5/16-inch water-cooled negative was employed, giving very satisfactory operation at all currents from 90 to 500 amperes.

Positive carbons from 9 to 16 mm in diameter have been specially designed to take advantage of the efficient cooling provided in the apparatus shown in Fig. 1. The first of these, a 13.6-mm carbon for operation at 290 amperes, was described in an earlier paper.[1] One of the outstanding features of this type of car-

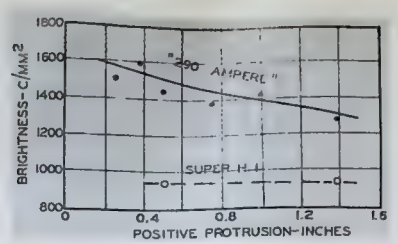


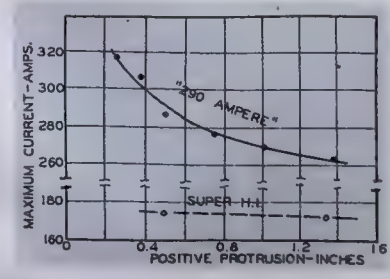
FIG. 6
Effect of positive protrusion on brightness of 13.6-mm, "290-ampere" and super high-intensity carbons.

bon is its high thermal conductivity, which is essential to the efficient transfer of heat from the floor of the crater to the water-cooled jaws. This is an important link in the cooling system required to postpone overload turbulence to higher current densities, in accordance with the theories previously expressed. Carbon composition, as well as water cooling, are thus involved in the achievement of crater brightness in excess of 2000 candles per square millimeter.

An interesting demonstration of this fact is given by a comparison of the two following figures. Fig. 4 shows the relationship between crater brightness and arc current for a new higher-current 13.6-mm carbon when operated first in water-cooled jaws at ½-inch protrusion and then in conventional air-cooled jaws at 1½-inch protrusion. The outstanding feature of the water cooling, combined with the shorter protrusion which this makes possible, is the ability to carry much higher currents than with air cooling, and to attain higher brightness as a result. Within the limits of satisfactory air-cooled operation, however, the carbon reaches a higher brightness at a given current than when water-cooled, so that the current efficiency of the carbon is reduced by water cooling.

The ability to carry higher currents with water cooling is not characteristic of all carbons, however. To illustrate this the performance of the 13.6-mm super high-intensity projector carbon, representative of the usual type of carbon, is shown in Fig. 5. Here water cooling in no case produces a higher brightness than can be obtained with air cooling, and the current efficiency is always less. Thus with this, as with most conventional types of carbons, water cooling has no such advantage in increasing brightness as is exhibited by the "high-brightness" carbon of Fig. 4.

FIG. 7—Effect of positive protrusion on current capacity of 13.6-mm, "290-ampere" and super high-intensity projector carbons.



Referring again to Figs. 4 and 5, it will be noticed that sharp breaks occur in three of the four curves in the two figures, at the points indicated by the vertical arrows. These are the currents at which the carbon "overloads," with the accompanying hissing and sputtering which is familiarly encountered in such cases. At higher currents, the arc is noisy and generally unsteady, prohibiting operation under practical conditions. It is the practice, of course, to operate a carbon at a current somewhat below this "maximum" value at which overload occurs. The 13.6-mm super high-intensity projector carbon, for example, overloads at about 176 amperes, whether water- or air-cooled, so that 170 amperes is the recommended maximum operating current for this carbon. The high-brightness carbon (Fig. 4) reaches a similar overload condition at 282 amperes when air-cooled. However, in interesting contrast to the usual types of overload, this carbon does not behave in the manner just described when water-cooled, even at currents up to 500 amperes. It operates quietly up to about 325 amperes. At higher currents, the light remains steady, but a sort of droning noise gradually develops, which is altogether different in quality and much lower in intensity than with the conventional type of overload, and quite tolerable in many applications. We have found this clear-cut difference to exist to the extent described only with carbons having relatively thin shells (less than 2 mm thick with the 13.6-mm carbon). High-brightness carbons having thicker shells (of which the 13.6-mm, "290-ampere" carbon[1] is an example) exhibit tendencies toward the hissing type of overload common to usual types of carbons, so that their "maximum" current is fairly well defined.

Another manifestation of the unique properties of the high-brightness type of carbon is the relation of brightness and of arc current to positive protrusion. Figs. 6 and 7 show these relationships for the 290-ampere, 13.6-mm carbon. As the protrusion is lessened to give improved crater cooling, the "maximum" current and the brightness increase. The usual type of carbon, exemplified again by the 13.6-mm super high-intensity positive carbon, exhibits little or no change in brightness and "maximum" current with change in protrusion.

High brightnesses have been obtained with these special carbons at significantly higher current and carbon efficiencies than have been reported by other investigators. For instance, the maximum performance predicted by Hallett[3] is exceeded by all of the 15 high-brightness carbons for which the data are plotted on Fig. 8. These carbons are from 9 to 13.6 mm in diameter and exceed the predicted performance at a given current density by as much as 10 per cent, although the general shape of Hallett's master curve is followed quite well.

Another interesting property of these carbons is their ability to produce a much higher brightness at a given consumption rate than was characteristic of the carbons which Finkelnburg[4] examined in Germany. Data on many of our high-brightness carbons ranging in size from 9 to 16 mm and burned in water-cooled jaws are plotted on Fig. 9. The

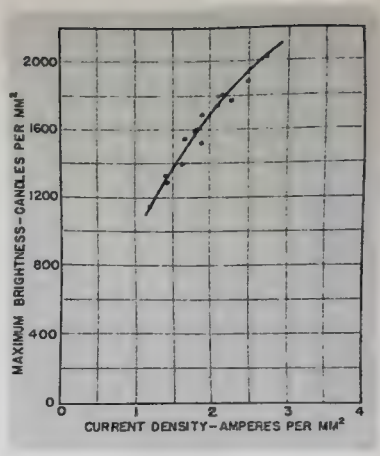


FIG. 8—Brightness variation with current density for "high-brightness" carbons.

brightness at a given consumption rate exceeds that reported by Finkelnburg by more than 50 per cent in all cases.

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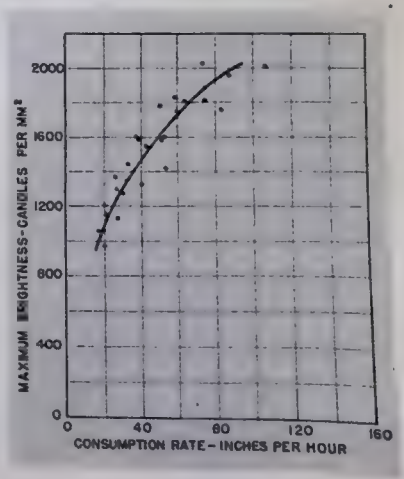
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(5) C. G. Heys Hallett, "Recent developments in carbon arc lamps," *J. Brit. Kinematograph Soc.*, vol. 11, p. 188; December, 1947.

FIG. 9—Brightness variation with consumption rate for "high-brightness" carbons.



The Simplex X-L Projector and Sound System

Years of Exhaustive Research and Testing Result In Many Worthy Design and Operating Improvements

BRIEF: *Good projection and sound are . . . beyond any shadow of a doubt . . . the two most important pillars on which a theatre's reputation for clear and audible shows rest . . . Without them no picture . . . not even an Academy Award winner . . . can hope to achieve and maintain satisfactory grosses at the boxoffice . . . Poor light or bad focus on the screen and rasping sound can destroy the patron's appreciation of the film . . . as readily as a shabby coat of paint can blind his eyes to the fine mechanical qualities of an automobile.*

In recognition of the inescapable fact that better projection and sound make for better theatres, the International Projector Corporation . . . one of the leaders among equipment manufacturers . . . has devoted the resources at its command toward the attainment of these goals . . . The latest results of the firm's efforts . . . the Simplex X-L Projector and Sound System . . . incorporate many advances in projection and sound techniques that are new and noteworthy.

A reading of the following article will suffice to show why such Simplex innovations as a single-unit, built-in conical rear shutter . . . which is so positioned in relation to the aperture that it affords a sharply defined cutoff of light . . . have been hailed with enthusiasm . . . and this is but one of several new developments.

THE SIMPLEX X-L PROJECTOR

Marking the first time since the early 1930's that the International Projector Corporation has developed an entirely new projector, the new Simplex X-L machine evidences, in its graceful lines, design features, and revolutionary operational merits, a painstaking five-year period of development and experiment. The engineering group assigned to the task of producing a projector which would excell in every way did not cease their labors until they were fully satisfied that every part of the mechanism was as flawless as they could make it.

Even after the Simplex X-L had passed with high honors a series of gruelling tests in the laboratory, its designers decided to provide a double-check by field-testing a number of experimental units in all types of theatres. These tests were run for well over a year under the most trying conditions in every kind of house from the 24-hour-a-day "grind" to the one-show-a-day village theatre. When this exhaustive period of trial came to end, enthusiastic reports from managers and projectionists in every theatre where the Simplex X-L Projector had been installed proved conclusively that every intended specification had been met. It was time, then, to introduce it across the nation.

Lens and Focusing

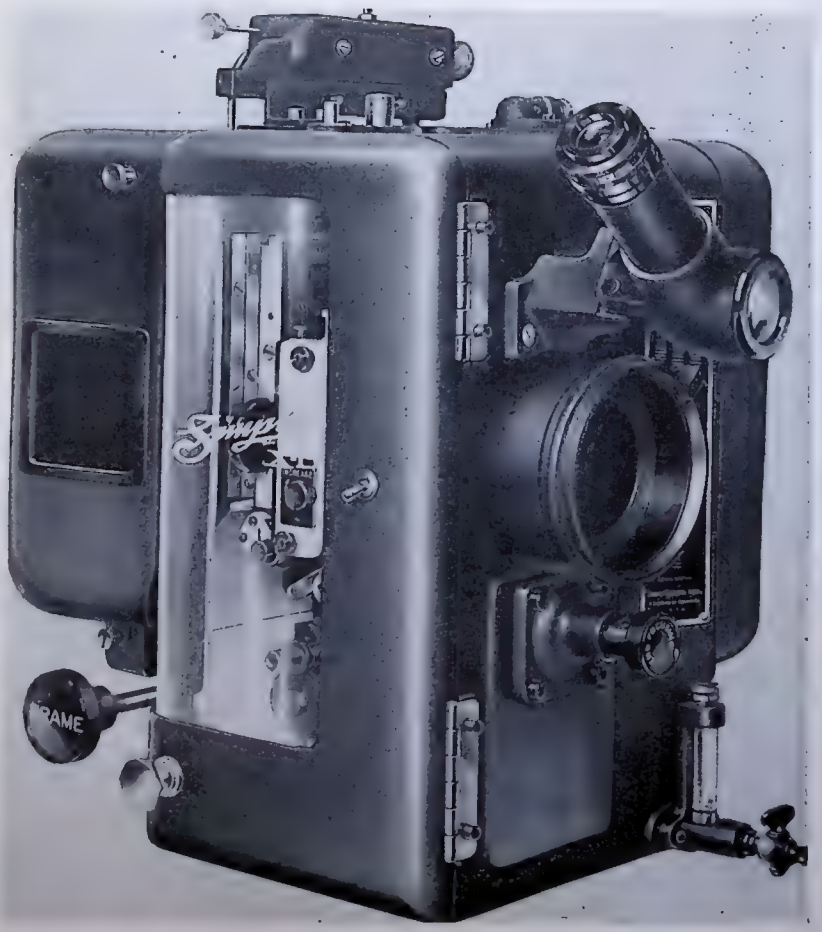
In keeping with the growing trend toward the use of high-speed lenses, the Simplex X-L has been outfitted with a new lens mount which can accommodate any lens up to and including four inches in diameter and having a speed of f:1.6. Since many theatres, especially drive-ins, have been at a distinct disadvantage in the past due to the unavailability of such a large lens mount, this feature of the Simplex X-L should prove particularly appealing to them.

Rapid, precise lens focusing is greatly simplified by means of the unique Simplex X-L micromatic Screenscope. By sighting toward the screen through this built-in unit, which employs an 8-power lens with prism, the projectionist may focus exactly any type of film print by manipulating the focusing knob positioned close at hand.

Operating Visibility

Since it is of utmost importance that an operator be able to keep careful check on his machine as it runs, a clear view of the mechanism is essential. The designers of the Simplex X-L have neatly provided for this need by the incorporation of a large glass panel on the operating side which, along with the illuminated film compartment, makes it possible for the projectionist to keep careful check on the entire mechanism while it is running. In addition, an enlarged sightbox, with eye-protective glass which obviates the necessity for stooping or squinting in an ungainly position, makes

MANY NEW DEVELOPMENTS and modern adaptations such as the "Screenscope" for pin-point focusing, the conical shutter, the four-inch lens mount, and simplified oiling, feature the new Simplex X-L.



the vital aperture area constantly visible to the operator.

Lubrication System

The lubrication system designed for the Simplex X-L, termed Spray-O-Matic, is said to be one of the most efficient ever conceived for so precise a mechanism as a motion picture projector. The entire area of the sealed-drive compartment is sprayed continuously by a fine film of re-circulated oil which reaches every drive unit down to the last gear tooth. Nonetheless, due to an effective seal, not a drop of oil is able to reach the film.

The oil-feed unit represents the utmost in simplicity, for it comprises only a high-speed pump, a filter, and a pipe. An oil gauge, with a petcock for drainage, shows the oil level at a glance. It is reported, however, that a projectionist in one of the theatres which tested the Simplex X-L for over a year, stated that there was little need for the petcock, since he had not changed the oil for 16 months. As a matter of fact, at the end of that period, he said the oil was still so clean as to be almost drinkable.

Conical Shutter

It is a well-known fact that the amount and quality of light which reaches a theatre screen depends to a great extent on the design and positioning of the shutter, which scans every infinitesimal frame of film twice for 1/90th second. The most efficient shutter, therefore, is the one which cuts off the light beam at its narrowest point—the aperture—and for the shortest possible time interval consistent with avoidance of disturbing distortion of the screen image.

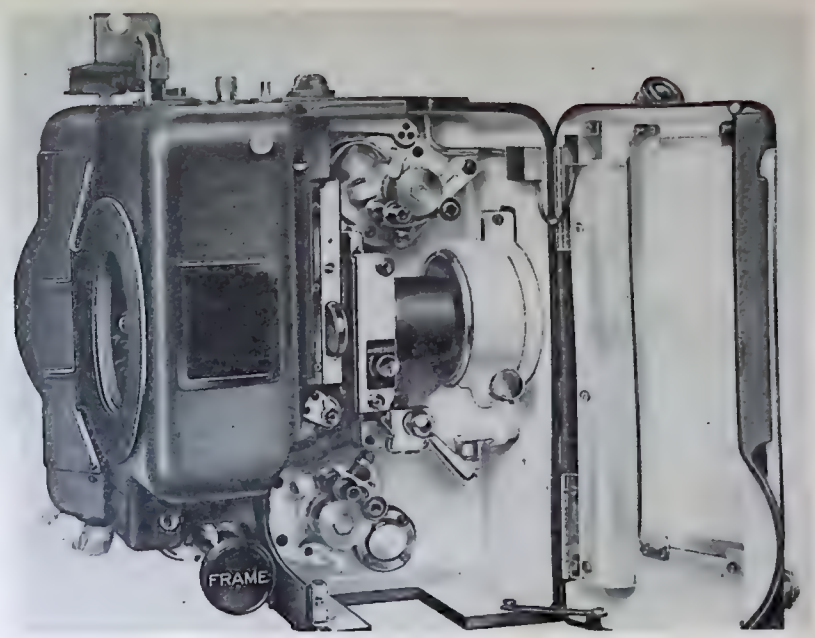
Since it is impractical to reduce the shutter blade width of a conventional dual shutter to move it closer to the aperture because of the "screen streaking" which would inevitably result, the designers of the Simplex X-L incorporated in their new machine a single-unit, built-in rear conical shutter. This shutter is positioned to intercept the light beam at its narrowest point—only 1⅛" from the aperture. According to the manufacturer, this novel shutter design effects the maximum transmission and the most sharply defined cut-off of light ever achieved in a motion picture projector with fewer parts, less gearing, and quieter operation.

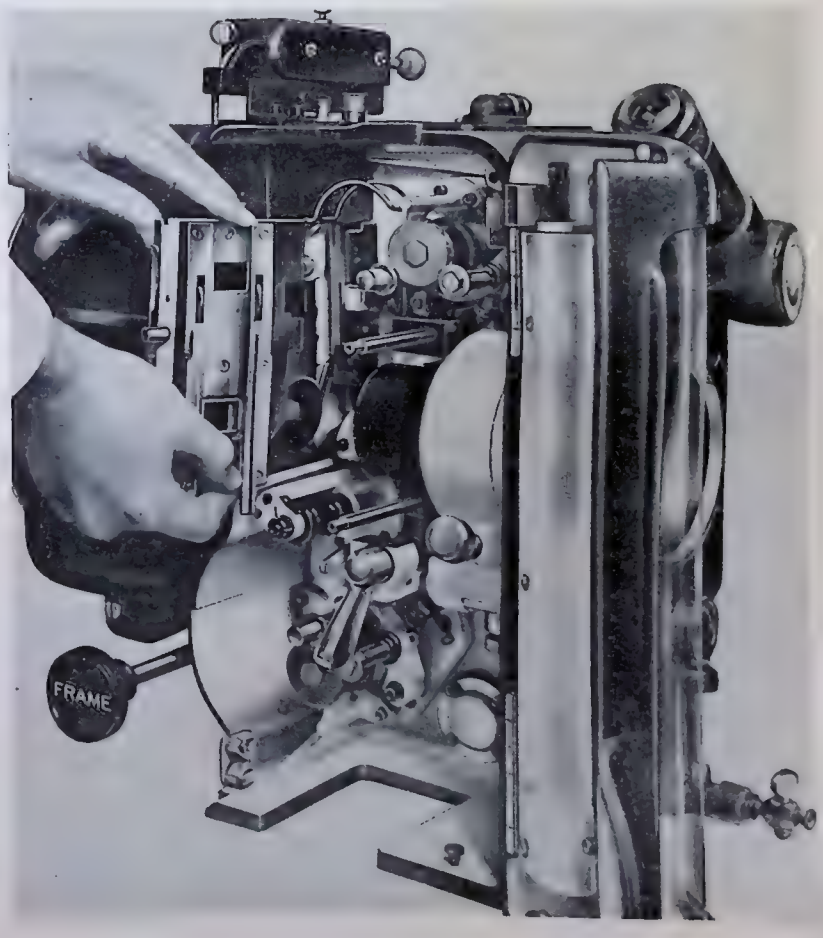
The extremely close positioning of this simplified shutter to the aperture also enables it to fulfill another important function, for it carries on its film side a series of small vanes which gently spray cooling air effectively over the aperture and the film both.

Adjustment of the conical shutter is readily accomplished on the Simplex X-L by the mere turning of a knurled knob atop the projector housing. There is no need for changing the relationship of the driven gear to driving gear, and there is the added advantage of equal wear on the contacting parts.

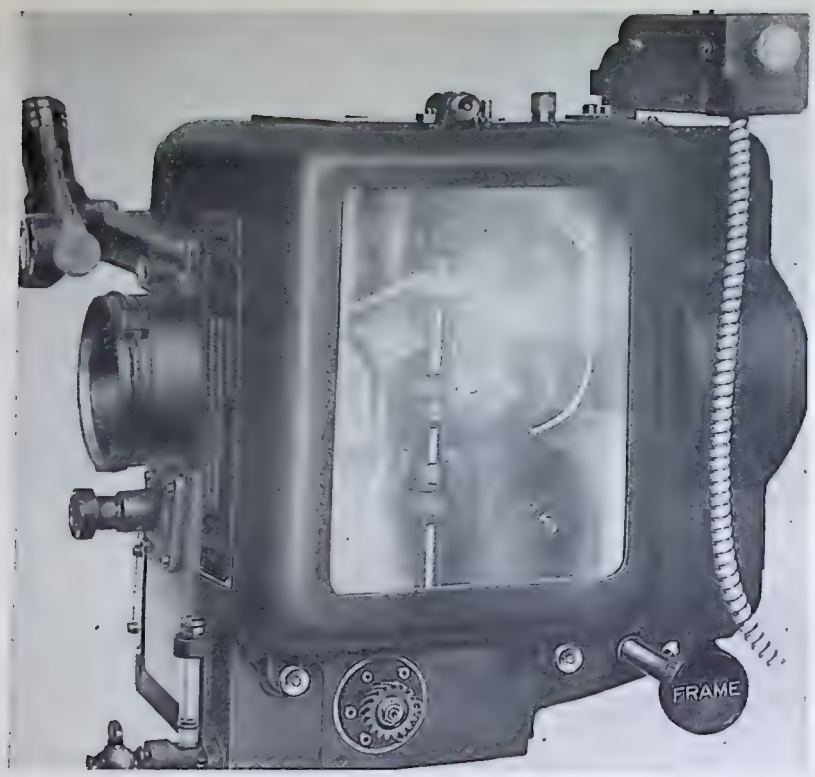
Sprocket and Gear Assemblies

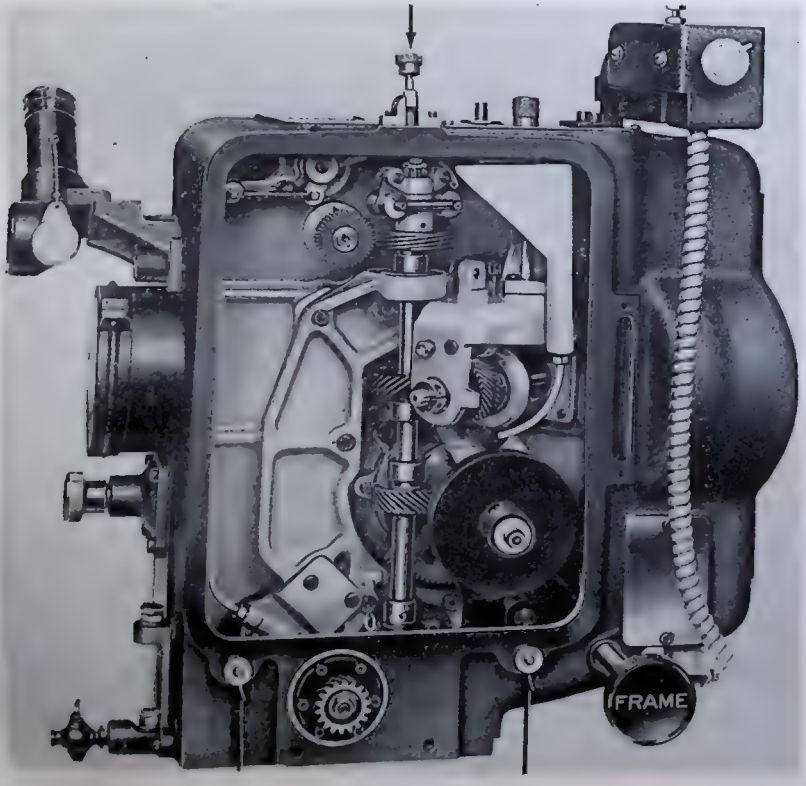
Both upper and lower sprockets on the Simplex X-L projector have 24 teeth, 8 more than the conventional type, and they operate at only 240 r.p.m., a reduc-





THE FILM SIDE, looking toward the front (above) and looking toward the back (below), boasts of well lighted cleanliness and of functional plan. Here can be noted the new lens mount, film trap, larger sprocket and takeup assembly, and many other interesting developments incorporated into this recently introduced precision mechanism. The objective was to facilitate and simplify the human efforts.





THE DRIVE SIDE, with glass panel in place and the oil fog working (above), and an intimate glassless view (below). The "Spray-O-Matic" lubricating system continuously sprays the entire sealed drive compartment with a film of oil. The simplified lower-friction gear train effects a noteworthy reduction in the mechanical load. Vibrationless precision operation over long periods of years was the objective.

tion in speed of 33⅓ per cent over ordinary sprockets.

This increase in the number of sprocket teeth has two easily recognizable advantages. First of all, the greater radius makes a wider bend and better wrap of the film possible, minimizes the danger of weak patches coming apart, and eases the transit of damaged film. Secondly, the reduction in speed should effect a substantial decrease in sprocket, gear, and bearing wear. Both sprocket assemblies are unit-constructed to aid improved performance and easier maintenance.

The main gear drive assembly of the Simplex X-L, a single vertical unit, has been greatly simplified and operates in sealed ball bearings. This factor is said to effect a reduction in mechanical load over conventional practice of 80 per cent at the start and of 66⅔ per cent while the mechanism is running.

In view of the fact that a sizeable majority of projector breakdowns are caused by excessive mechanical load in both starting and running the mechanism, the Simplex X-L gear assembly should practically eliminate gear stripping and bring about a radical decrease in running wear and operating costs.

The gear train as a whole turns on sealed ball bearings, for sleeve bearings have been eliminated entirely. Friction is completely suppressed, so the mechanical load over-all is considerably reduced. The gears in this assembly are formed of case-hardened, polished steel, meshed with a phenolic fabric made especially for gears.

An important contribution to long gear life is found in the fact that, during the necessary frequent framing operation, all gear teeth always mesh with the same mated gear to effect an even distribution of wear for all teeth.

Intermittent Design

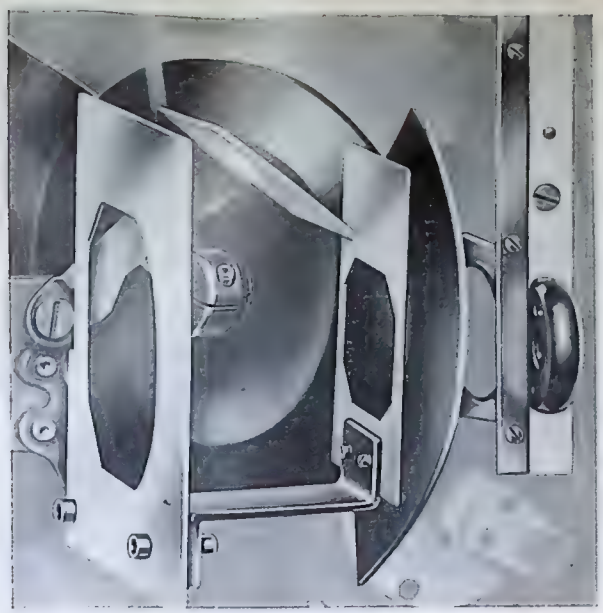
The newly designed intermittent movement of the Simplex X-L features a flywheel mounted directly on the cam to enable elimination of intermediate gearing and to provide less wear, quieter operation, and greatly reduced maintenance costs. A film of filtered oil flows evenly over all working surfaces and does away with every particle of foreign substance without permitting a single drop of oil to reach the film.

The frame lock indicator, one of the best operating aids ever developed, represents another projection "first," since previously no projector embodied a sure means for determining whether or not the star and cam of the intermittent movement were in a true locked position, a vital requisite for correct framing. The distinct white lines and pointer on the knob at the fore end of the intermittent movement of the Simplex X-L provide instant visible evidence of a positive lock between star and cam.

Film Gate and Trap Assembly

The film gate of the Simplex X-L marks still another advance in projection practice. The extra-long tension shoes, which are practically self-adjustable laterally to accommodate varying film widths, exert an equally exact tension on both edges of the film.

The knob lettered "Increase" operates a five-step control which locks at each



THE CONICAL SHUTTER is built in close to the aperture.



THE SAFETY SHUTTER can be reset while the projector runs.

position and applies the proper tension for all types of film prints—new and green, old and shrunken, thicker or thinner.

The film trap has a curved plate which makes it possible to position film correctly between the guide rollers and insures a true, direct path to the guide rails. Situated just above the film aperture is a framing aperture which, illuminated when the housing door is opened, enables precise, rapid framing. A sufficient amount of "finger room" makes threading a speedy, easy operation. Both the film gate and trap are removable.

Film Magazines

Simplex X-L magazines are one-quarter of an inch deeper on each side of the reel to prevent reel contact with the side walls and to allow the projectionist more working space. The upper magazine includes a large observation window with lighted film footage markings for either four or five-inch reel hubs, and even the small two-inch reel hub is visible at an appreciable distance. The improved fire valves and rollers may be easily cleaned.

The rear side of the upper magazine has another observation window with film footage markings, and a light switch is provided for illuminating the interior. The reel spindle has a backlash-free friction device, while holdback tension is easily adjustable in steps. Self-lubricating Oilite bearings prevent end thrust.

The lower magazine also features an observation window. A fulcrum-mounted wheel spindle will accommodate any size reel hub and maintain positive even

Takeup Assembly

The Uni-Tension takeup assembly employs an all-ball-bearing cone drive which does away with friction and provides for a self-adjusting, uniform tension. Cinching and scratching of the film are prevented, as well as torn sprocket holes and hooked sprocket teeth. Smooth operation is possible over a wide latitude, for reel hubs of from two to five inches may be used. The takeup assembly is available with either round or V-belt.

THE SIMPLEX X-L SOUND SYSTEM

A new Simplex X-L Sound System, developed along with the new Simplex X-L Projector, has been designed to incorporate the maximum in reliability, efficiency, and ease of maintenance. The system has the advantage of including the latest electronic developments, while retaining certain well-known features which have been proven to possess outstanding merit in the 4-Star design.

Power Amplifiers

The new Simplex X-L Sound System employs two alternative power amplifiers —one rated at 20 watts and the other at 60 watts. Both amplifiers use a novel direct-coupled driver circuit, over-all negative feedback, and a 500-ohm low impedance input circuit. The amplifiers have a frequency response characteristic flat within plus or minus 1 db between 40 c/s and 10,000 cycles. All warping adjustments are made before the signal reaches the power amplifier.

Due to the above features, the rated power output is not affected by the warping set-up, the amplifier is not sensitive to differing tube characteristics or varying supply voltages, and the input circuit is not prone to electrical pickup and other interference factors. In addition, the amplifiers are interchangeable in the cabinet and are connected by means of self-locking lugs and screws.

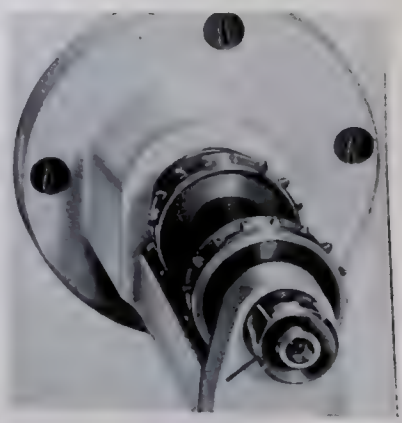
Standard Cabinet

A free-working chassis mounting device fitted to the standard cabinet allows the chassis to be withdrawn and inverted while in motion. Since four chassis, two amplifiers, a combined loudspeaker network, monitor amplifier, and an exciter lamp power lamp supply may be mounted in the standard cabinet, varying power requirements may be collectively accommodated by a single cabinet.

The new exciter lamp power unit mentioned above incorporates a voltage regulating transformer and a selenium rectifier, and is fitted with a current sensitive relay in series with each exciter lamp. Thus a constant sound level may be maintained under conditions of varying voltage supply, and there is no need for replacement of such parts as rectifier tubes.

The monitor amplifier, also referred to above, is a self-contained unit which enables the system to be monitored adequately, irrespective of the level of the stage speaker line and without loss of

THE FRAME LOCK indicator eliminates error.





THE "SCREEN-SCOPE" aids the operator to obtain precise focus.



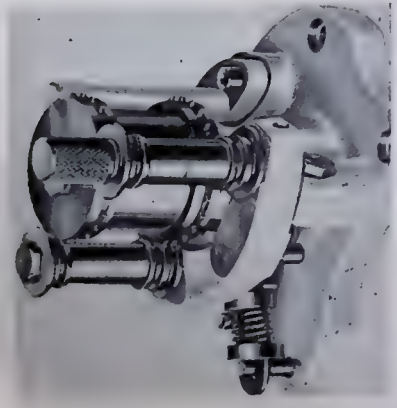
REEL-END FOOTAGE MARKINGS are on the glass port of the upper magazine.

system power. The monitor amplifier may be easily removed for service or replacement, and a switch, provided for emergency monitoring, connects the monitor speaker to the stage line through a pre-set series resistor. A new high-quality monitor speaker has been provided.

Non-Synchronized Input Cabinet

This small cabinet, standard equipment with the Simplex X-L Sound System, contains a microphone, phonograph selector switch, a fader control, a sound changeover switch, and a plug-in pre-amplifier. This amplifier is used for the non-synchronized input and as a spare for the film input. Its primary distinguishing characteristic lies in the fact that its use within the soundhead eliminates the difficulties associated with the high impedance co-axial cable formerly used in the 4-Star design. The cabinet also includes the high-frequency warping adjustment for the system.

THE 24-TOOTH Sprockets save wear and damage.



The addition of proper facilities for the attachment and control of the non-synchronized inputs is an entirely new feature of the Simplex X-L Sound System. The non-synchronized input is recognized as a normal requirement for all installations and proper provisions have been made accordingly. Sound changeover to or from film to non-synchronized input may also be made as between soundheads.

Changeover Cabinet

One changeover cabinet is used with each soundhead and contains a fader control, a sound changeover switch, and a signal lamp. Since the necessary pre-amplifier is located within each soundhead, the changeover cabinet is approximately one-half the size of the comparable 4-Star volume control cabinet. Greater flexibility and ease of mounting are thus provided on a crowded front wall.

A novel method of changeover switching, accomplished by connecting the output from the appropriate pre-amplifier to a 500-ohm line (the switch performing this function is manually set and electromagnetically released), is inaudible and requires only simple wiring. The convenience of regular sound changeover between film and the non-synchronized input is also provided. In contrast to the 4-Star system, the new method of sound changeover switching involves the addition of only one wire to the normal inter-machine wiring. Switching and wiring are not in any way complicated by the addition of a third projector.

Soundhead

A number of new features have been incorporated in the design of the soundhead. The main frame has been enlarged to contain the pre-amplifier, and a motor enclosure has been added. This enclosure improves the appearance of the complete equipment, but is functional and may be easily removed for service. The mechanical and optical layout of the new Simplex X-L Soundhead is essentially the same as that of the well-tried 4-Star Soundhead.

Another new feature of the Simplex X-L Soundhead is a double exciter lamp turret assembly which replaces the 4-Star type plug-in lamp unit. In the event the operating lamp fails, the spare lamp may be swung into position immediately. Provision is made for the accurate alignment of both lamps.

Loudspeaker Equipment

A new Simplex "Voice of the Theatre" Speaker System has been designed by the Altec-Lansing Corporation expressly for use with the Simplex X-L Sound System. Among the new design features incorporated in the new speaker equipment is a high-frequency driver unit fitted with an acoustic filter cap, which complements the function of the dividing network and results in an outstandingly smooth frequency response in the cross-over region.

This new design also reduces the possibility of damage to the diaphragm due to overloading and makes it possible for the high-frequency driver to reproduce high level sound without distortion.

The speaker equipment is also provided with a low-frequency horn of an entirely new design. This innovation has resulted in ideal phase conditions between the low-frequency and high-frequency horns over a wide angle of distribution, and also facilitates the stacking of multiple low-frequency horns.

Effect of Carbon Cooling on High-Current Arcs

Net Voltage Drop by Positive Carbon Cooling Reflects Arc Changes Due to Heat Differences

By Wolfgang Finkelnburg
Engineer Research and Development Laboratories, Fort Belvoir, Va.

BRIEF: *The influence of carbon cooling, especially of the positive carbon, on the properties and the mechanism of the high-current carbon arc are studied systematically. An experimental super high-intensity carbon, designed by the National Carbon Company especially for this service, was used. With respect to the technical advantages of carbon cooling (increased arc steadiness, reduced positive-carbon consumption, reduced crater depth, higher possible brightness) our results agree with those presented simultaneously by the National Carbon group. Quantitative relations between current, net arc voltage, net arc wattage, gross arc wattage, crater brightness, carbon consumption, light efficiency, and crater depth for the cooled and the uncooled arc are presented in the form of graphs based on more than 1000 measurements. The considerable reduction of the net arc voltage by cooling the positive carbon indicates an influence of carbon cooling on the arc mechanism itself which is explained, on the basis of the author's anode drop theory, as a consequence of chemical and structural changes in the carbons resulting from the difference in temperatures near the burning end. These changes have been confirmed by X-ray diffraction studies.*

Introduction

Water cooling of the positive as well as the negative carbon of high-intensity carbon arcs has proved to be of great advantage in cases where highest brightness, and therefore highest current density, is desired.[1-4] A systematic study of the influence of water cooling on the properties of the arc and its mechanism therefore seemed desirable and has been carried out at the Engineer Research and Development Laboratories by the author with the help of L. R. Noffsinger and C. Orr, using an excellent new super high-intensity experimental carbon of 11-mm diameter (No. 070) manufactured for this service by the National Carbon Company.

Experimental Arrangement and Method of Measuring

The measurements were made with a Mole-Richardson lamp (see Figs. 1-3) which has a carbon angle of 52 degrees. The lamp was designed for automatic feeding but for these studies it was changed to hand-controlled feeding. The carbons were cooled by copper jackets through which water was circulated, and which enclosed the carbons near their burning ends (see Fig. 2). The carbons protruded from these water jackets, through holes only slightly larger than the carbons, a distance of approximately 7 mm for the positive, and approximately 20 mm for the negative carbon. Water jackets in the form of semicircular jaws, pressed from both sides against the carbons, would offer certain technical advantages; however, they were not used for this investigation, because of the difficulty of manufacture.

For comparison of measurements of water cooling with forced-air cooling, a copper-finned head (see Fig. 3) was used. This head was cooled with compressed air and served to prove that identical effects could be achieved by cooling the positive carbon with compressed air as with water.

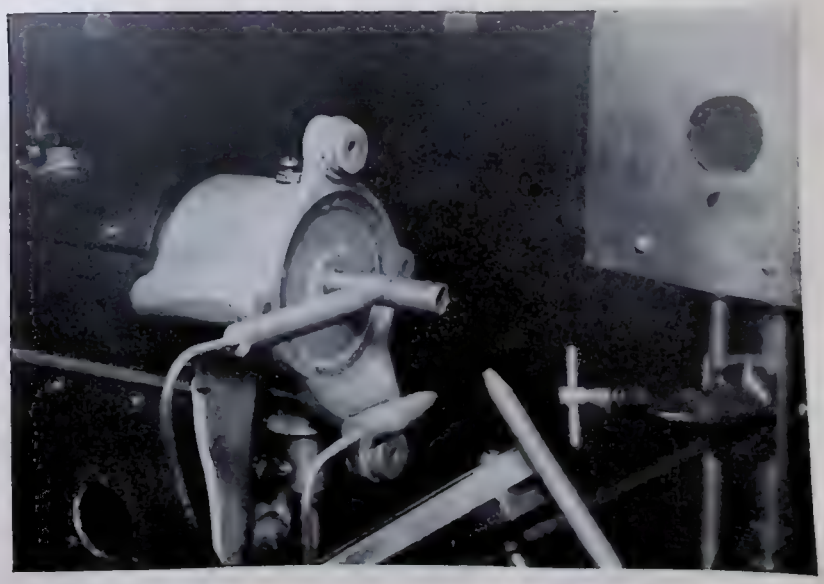
For the essential set of measurements, 9-mm copper-coated negative carbons were used with the 11-mm positive carbons; the arc length of 18 mm was kept constant by observing a greatly magnified image of the arc, with marks for the desired position of the carbon tips. A pointer, attached to the rear end of the positive carbon, permitted its length to be measured on a millimeter scale during the operation of the arc. Thus with a stop watch, the rate of consumption of the positive carbon could be measured. This was done as soon as a stationary state of operation had been reached for each respective current.

The gross voltage of the arc, including the voltage drop in the carbon tips, was measured by connecting the voltmeter across the carbons at the water-cooled heads for the cooled arc, and at the negative clamp and the positive brush for the uncooled arc. In order to measure the net arc voltage, two carbon probes (see Figs. 1 through 3) could be made to touch the carbon tips near the burning ends by means of a magnetic relay. The crater depth was measured by means of a special gauge, while the crater diameter was measured with a standard caliper. The crater brightness was measured by projecting the crater image with a lens of known aperture on a photosensitive cell according to a method published by the author.[5, 6] While the current and arc length were kept constant with utmost care, voltage, crater brightness, and positive-carbon consumption were measured simultaneously and recorded as averaged over 2-minute runs. After each run the crater depth was measured. During the first tests, the crater diameter also was measured, but this was discontinued since it remained constant at 11 mm for the water-cooled arc, and was from 0.1 to 0.2 mm smaller for the uncooled arc.

General Properties of Cooled and Uncooled Arcs

Comparison of arcs without carbon cooling, with water cooling of both carbons, and with exclusive cooling of either the positive or the negative carbon re-

FIG. 1—Experimental lamp with probes for measuring the net arc voltage, without water cooling.



* *Reprint of a paper presented October 26, 1948, at the Society of Motion Picture Engineers Convention in Washington and published in the Journal of the S.M.P.E., April, 1949.*



FIG. 2—Experimental lamp with water jackets and probes.

vealed that water cooling increased the steadiness of the arc and its radiation considerably. Cooling of the negative carbon alone had no effect other than that of steadying the arc, while cooling of the positive carbon increased, to a great extent, not only the steadiness of the arc, but also changed important properties of the arc, such as arc voltage and positive-carbon consumption. Furthermore, water-cooled carbons, especially if designed for this kind of operation, reached a much higher brightness than uncooled ones. With the best uncooled 11-mm carbons, spluttering and hissing of the arc began at a brightness of approximately 1500 candles per square millimeter, while steady operation of the same carbons, when water-cooled, was possible up to a brightness of 1850 candles per square millimeter.

From all measurements the conclusion seems to be inevitable that cooled positive carbons behave quite differently in the high-current carbon arc than do uncooled ones, in which each part is heated to a very high temperature before the arc reaches it. A detailed study of the changes in the carbon core resulting from this heating is under way.

Quantitative Results

A quantitative comparison of the properties of the high-current carbon arc with cooled and uncooled 070 carbons is presented in Figs. 4 through 12, in which averaged results of a large number of measurements, carried out with many samples of 070 carbons, are plotted.

Fig. 4 shows one of the most unexpected effects of cooling the positive carbons: For all currents the net arc voltage (as measured with the probes between the carbon tips) is considerably lower than without cooling, no matter whether the negative carbon is cooled or not. As the arc stream is independent of the positive carbon, it seems safe to

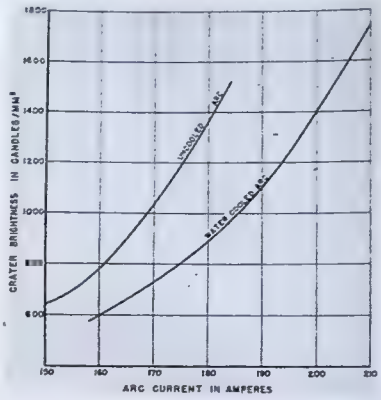


FIG. 4—Comparison of crater brightness of cooled and uncooled arcs at equal currents.

conclude that this decrease of the arc voltage is caused by a decrease of the anode drop, and this conclusion is in agreement with earlier investigations on the anode drop by the author.[7] According to the theory of arc radiation, developed in connection with the anode-drop work, a decrease of the anode drop always causes a decrease of the crater bright-

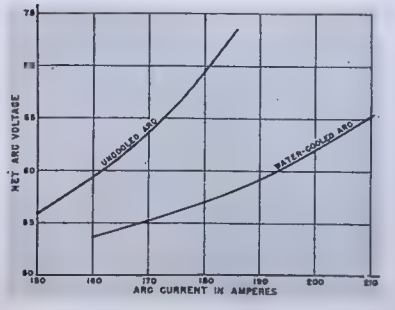
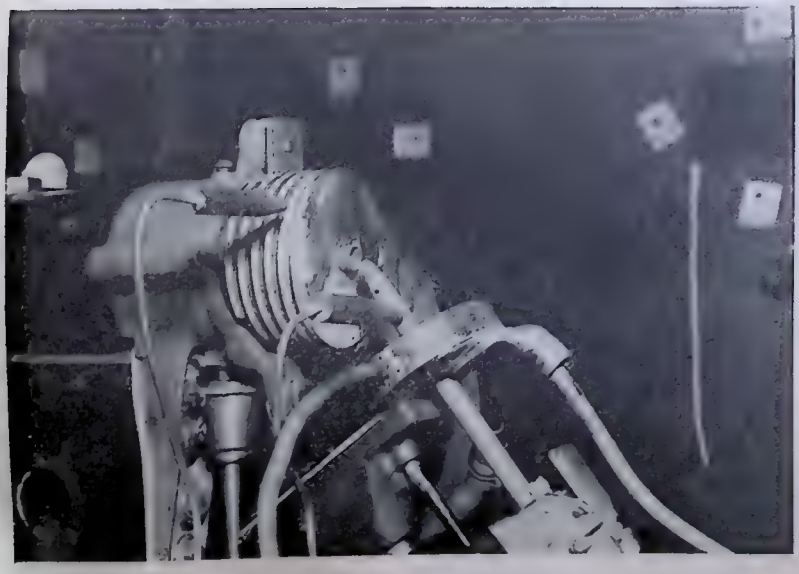


FIG.5—Decrease of net arc voltage caused by cooling of positive carbon (same arc length).

ness. Fig. 5 proves that water cooling of the positive carbon actually does cause a considerable reduction of the crater brightness at the same current. In Fig. 6, the crater brightness is plotted against the arc wattage. The middle curve refers to the water-cooled arc (where the difference between the net arc wattage and the gross arc wattage falls within the limits of accuracy of our measurements because the carbon protrusions are short), while the upper and lower curves are plotted against the net arc wattage

FIG. 3—Experimental lamp with probes and copper-finned head for forced-air cooling.



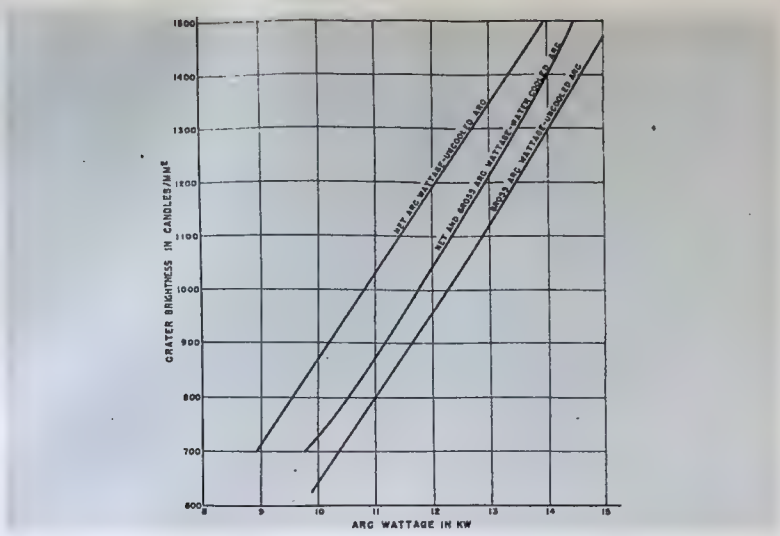


FIG. 6
Comparison of crater brightness of cooled and uncooled arcs for equal net and gross arc wattages.

and the gross wattage of the uncooled arc. For a given net arc wattage the uncooled arc gives a higher brightness than the water-cooled arc, while a given gross wattage, actually dissipated in the arc and the carbons from the negative clamp to the positive brush, results in a higher brightness for the water-cooled arc.

With respect to the total light efficiency, measured for convenience in candles per watt gross arc voltage, the uncooled arc is always superior to the water-cooled arc, as may be seen from

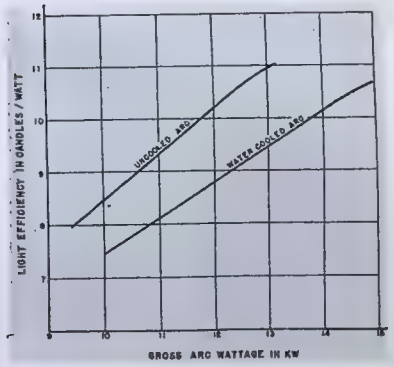


FIG. 7—Comparison of light efficiencies of cooled and uncooled arcs for equal gross arc wattages.

Figs. 7 and 8, in which the efficiency in candles per watt is plotted against the gross arc wattage and brightness, respectively. With reference to the gross arc wattage, the difference is about 12 per cent, while with reference to the same crater brightness, it is only approximately 6 per cent. This slightly lower light efficiency of the water-cooled arc probably is caused by the fact that the water carries away part of the energy transferred to the positive carbon by the arc.

The most important feature of the water-cooled arc, next to its superior steadiness at highest brightness, is its low positive-carbon consumption as seen from Fig. 9, where consumption is plotted against crater brightness. Compared with other carbons,[8] the consumption of the experimental carbon No. 070 is very low even without water cooling. By water cooling, however, its consumption is reduced by as much as 35 per cent. In order to demonstrate the scattering of the measurements, some consumption-brightness measurements for the uncooled arc are plotted in Fig. 10.

There is also a marked influence of water cooling on the crater depth which, referred to arc wattage (Fig. 11), or brightness (Fig. 12), becomes shallower by cooling the positive carbon. This effect, although in Fig. 12 amounting to only approximately 14 per cent at higher brightness, is of technical importance, because too deep a crater is not well suited for illuminating lenses or mirrors of large apertures.

Measurements carried out with the air-cooled head (Fig. 3) gave results similar to those just described; however, the differences in the properties between the air-cooled and the uncooled arc are not quite so large as those between the water-cooled and the uncooled arc.

All described results, attained with the carbon No. 070, were checked with two further experimental carbons, Nos. 081 and 088, and with regular 12-mm searchlight carbons. While the absolute values

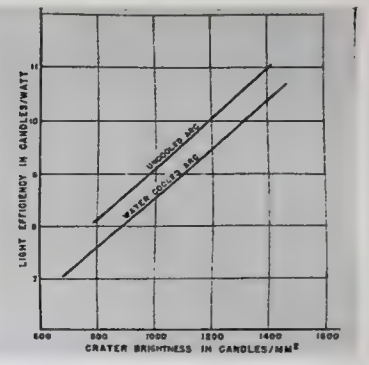


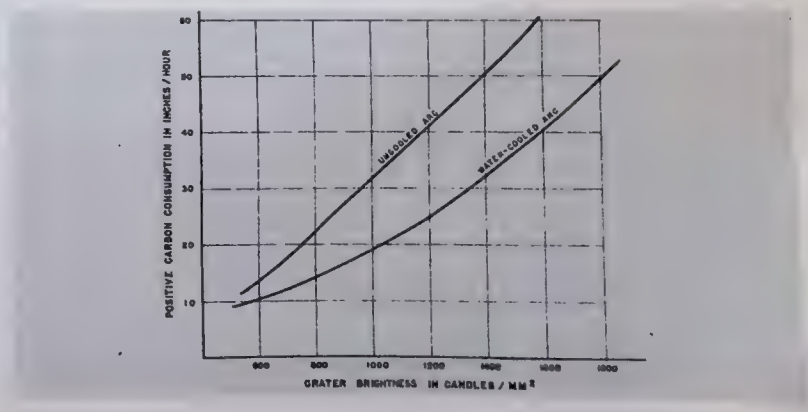
FIG. 8—Comparison of light efficiencies of cooled and uncooled arcs for equal crater brightness.

of all arc properties varied because of different values of core and shell diameters, the change of the arc properties as a consequence of cooling the positive carbon was similar to that for the carbon No. 070. The effect of carbon cooling on the high-current carbon arc thus seems to be a general one, though more pronounced with carbons specially designed for this purpose.

Results and Theoretical Conclusions

From the technical point of view, water cooling of both carbons has the advantage of making possible the application of considerably higher brightness than was hitherto possible with good steadiness of the arc, with a shallowed crater depth, and with greatly reduced carbon consumption. The only disadvantage is that the required current is considerably higher than without cooling, while the

FIG. 9
Comparison of positive-carbon consumption of cooled and uncooled arcs for equal crater brightness.



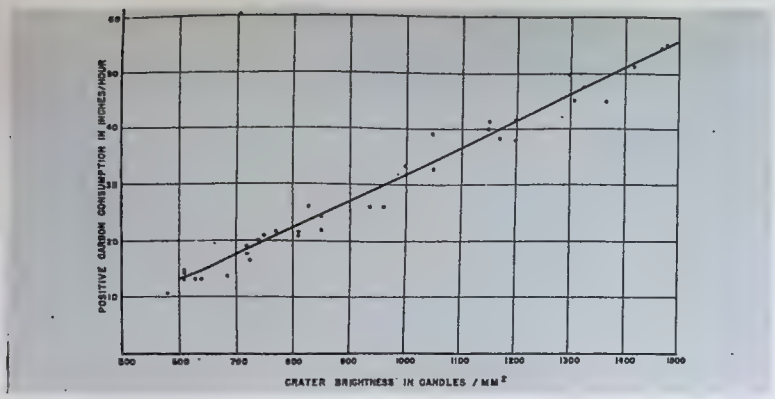


FIG. 10—Increase of positive-carbon consumption with crater brightness.

decreased arc voltage does not form a compensating technical advantage.

From the physical point of view we have three important results:

1. The reduced net arc voltage indicates a decrease of the anode drop as a result of cooling the positive carbon.

2. No arc property was found which was not changed by cooling the positive carbon, leading to the conclusion

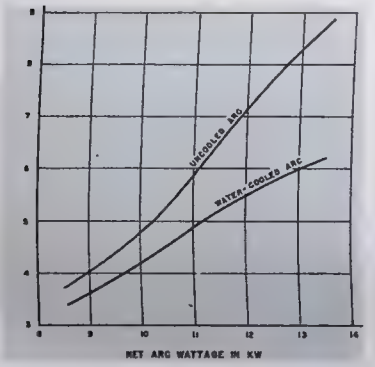


FIG. 11—Comparison of crater depth of cooled and uncooled arcs for equal net arc wattages.

that a cooled and an uncooled carbon behave like carbons of different composition or structure, these internal changes being caused by the different temperatures immediately behind their burning ends.

3. These internal changes in the carbons have been confirmed by X-ray diffraction studies, the results of which will be described in detail in a future publication.

The mechanism of the cooling influence follows from these results in connection with earlier investigations of the arc mechanism by the author,[9] and can be indicated here only briefly.

The electrons, accelerated by the anode-drop potential, transfer an energy of 6 to 7 kilowatts to each square centimeter of the crater surface which serves to vaporize anode material and heat it to a temperature of about 6000 to 7000 degrees Kelvin. The illuminant vapor is heated furthermore by collisions with electrons in and immediately in front of the positive crater, the electrons dissipating there an additional amount of 2 to 3 kilowatts. The resulting vapor temperature of 7000 to 8000 degrees Kelvin is responsible for the high brightness of the crater vapors. The limit of load which a positive carbon can stand, and which determines the maximum brightness, is given by the transition to an unsteady, explosive vaporization instead of the desirable smooth and steady evaporation. This limit depends on the chemical and physical structure of the carbon. The possibility of using higher current density and thus attaining higher brightness by cooling the positive carbon seems to be caused by two effects: In the first place we have a reduction of the anode drop which means a reduction of the energy spent for vaporization at a given current. In the second place, the carbon, being kept cool up to a point quite near to the crater, keeps its original structure unchanged (compared with the highly heated uncooled carbon) and therefore is able to stand a higher load before beginning to evaporate unsteadily.

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(2) M. A. Hankins, "Recent developments of super-high-intensity carbon-arc lamps," *J. Soc. Mot. Pict. Eng.*, vol. 49, pp. 37-48; July, 1947.

(3) C. G. Heys Hallett, "Recent developments in carbon arc lamps," *J. Brit. Kinematograph Soc.*, vol. 11, p. 188; December, 1947.

(4) Charles A. Hahn, "High-intensity projection arc lamps," *J. Soc. Mot. Pict. Eng.*, vol. 50, pp. 489-502; May, 1948.

(5) W. Finkelnburg, "Leuchtdichte, Gesamtstrahlungsdichte und schwarze Temperatur von Hochstromkohlebögen," *Zeit für Phys.*, vol. 113, pp. 562-581; 1939.

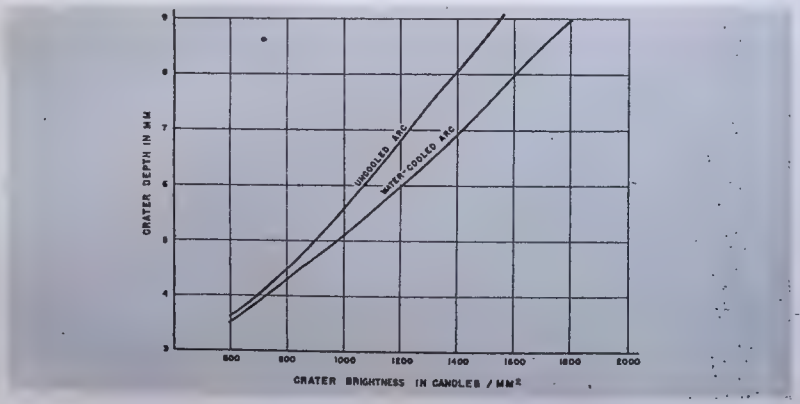
(6) W. Finkelnburg, "The High Current Carbon Arc," Fiat Final Report 1052 (PB-81644, Office Technical Services, U. S. Dept. of Commerce, Washington, D. C.), p. 37 and Fig. 41.

(7) Pages 25 and 46 of reference 6.

(8) Page 165 and Fig. 49 of reference 6.

(9) Pages 106 through 117 of reference 6.

FIG. 12—Comparison of crater depth of cooled and uncooled arcs for equal crater brightness.



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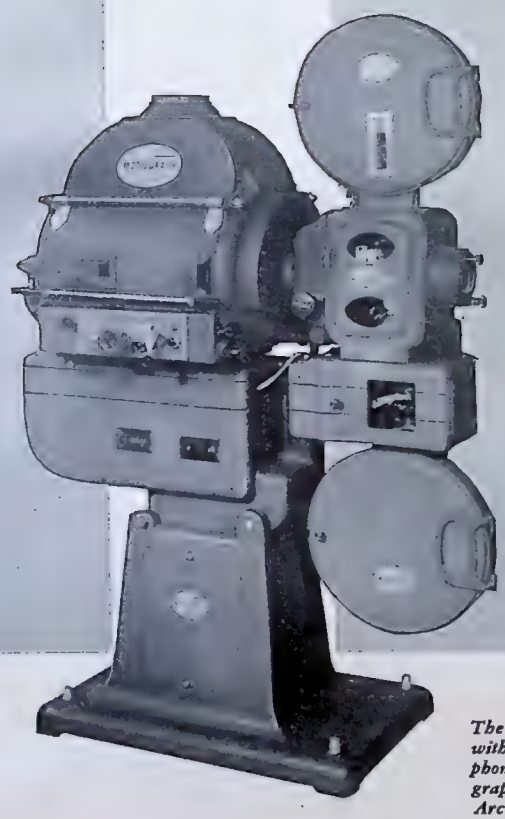
MODEL "AA"

Double Shutter PROJECTORS

Motiograph Projectors are designed and built to operate longer without costly repairs and replacements, and consequently have the lowest possible ultimate cost. The post-war double shutter "AA" will give maximum screen illumination without flicker or travel ghost, and with a steady and clearly defined picture.

All gears run on lubricated-for-life double row ball bearings, thus assuring smooth and quiet performance. The "AA" is simple to operate and easy to maintain, as the large roomy housing makes cleaning easy, while lubrication is simple. The "AA" is provided with an internal cooling fan, while a separate blower is also available for use with high amperage arcs. This blower cools aperture and film without causing the twenty percent loss in light which results from the use of a glass filter.

Both models of pedestals have provisions for precise horizontal and vertical optical alignment of lamp and projector mechanism. The pedestals have provisions for all possible projection angles, as they may be tilted 32 degrees downward and 17 degrees upward. The new "AA" Magazines are extra wide, and incorporate an upper reel shaft tension device and a fully enclosed take-up that will, after initial setting, stay in their correct positions for years without adjustment. Model "AA" Mechanisms, and both "AA" and "S" Pedestals, are designed for use with any standard sound reproducer, while "AA" Magazines will fit any standard projector mechanism or sound reproducer.



The Motiograph AA Projector Mechanism, with AA Pedestal, AA Magazines, Mirrophonic De Luxe 7500 Reproducer and Motiograph Hi-Power 75/115 ampere High Intensity Arc Lamp.

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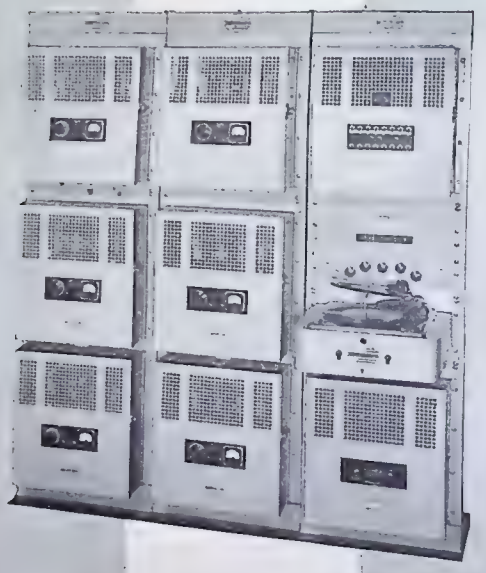
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MOTIOGRAPH DR-6 SOUND SYSTEM (with auxiliary rack for ramp switching cabinet, radio, record player, and system exciter lamp power unit).

ONE STANDARD OF QUALITY

Motiograph manufactures but one standard of quality in its sound equipment. The lowest cost model for the 500 seat theatre has the same quality components as do the largest models for 5000 seat indoor theatres or 1000 car drive-in theatres.

Motiograph furnishes deluxe SH-7500 reproducers based on designs of Western Electric Company and D.C. for the exciter lamps with auxiliary A.C. excitation, in all systems, regardless of cost or size of the system.

THE INDOOR MODELS

Indoor theatre models are available with 20, 40, 75 and 150 watt amplifiers and with loudspeaker systems ranging from one high frequency and one low frequency unit to eight high frequency and eight low frequency units.

THE DRIVE-IN MODELS

Motiograph offers 10 sound system models with power outputs of 100, 150, 200, 225, 250, 300 and 500 watts for use with in-car speaker equipment or large central speaker systems. These systems are of two general types. One type has one or more preamplifiers (voltage amplifiers), one or two driving amplifiers, one or more 75 watt or 250 watt power amplifiers and one or two switching panels. The other type, the multiple amplifier systems, exclusive with Motiograph, have one or two preamplifiers, one or two combination driving and power amplifiers, two, four, six or eight power amplifiers, and varied amplifier switching facilities.

EMERGENCY FACILITIES

In the dual models of the Motiograph line switching facilities are provided which permit system operation on any or all of the amplifiers in the system. This is an unusual emergency provision.

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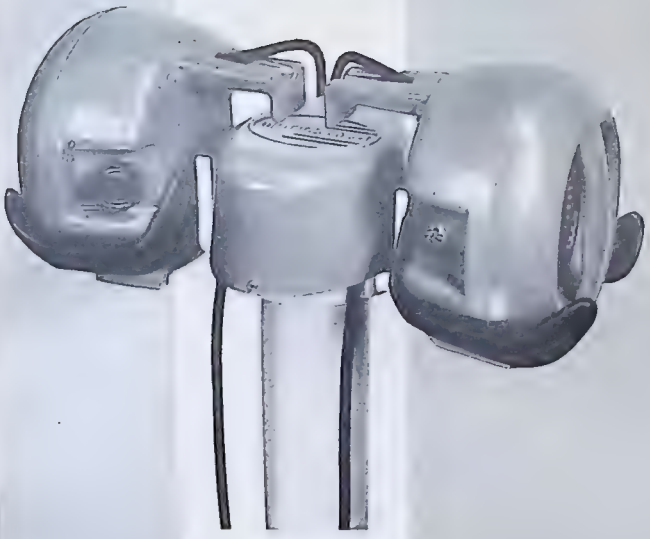
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In-Car SPEAKERS

Outmode all others for exceptionally fine sound and ability to take abuse.



IT HAS BEAUTY THAT LASTS SEASON AFTER SEASON

Strikingly beautiful in its overall appearance, its modern design makes it the most outstandingly attractive speaker ever made. The lustrous mahogany finish will not discolor, chip or mar in extreme weather.

IT HAS STRENGTH TO ASSURE LONG LIFE

Rain, snow, heat, cold, roughest handling will not crack, warp or dent the strong, completely rust-proof housing. It has a flexural and tensile strength of 9,000 pounds per square inch.

IT IS LIGHT AND EASY TO HANDLE

The housing, which holds a water-proofed speaker unit is extremely light in weight. A handle, molded into the face of the speaker makes for easy handling. The smooth molded hanger will not scratch the car.

IT HAS EXCEPTIONAL TONE QUALITY

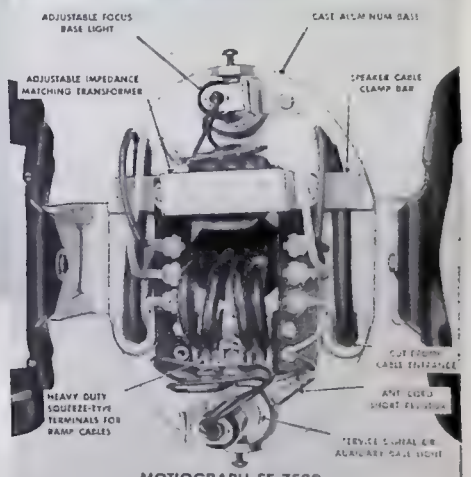
Only a high quality speaker unit with a large cone can give good sound reproduction. That is why this new speaker has a proven speaker unit with a 5″ cone.

IT IS LOW IN INITIAL AND ULTIMATE COST

The new Motiograph speaker is low in initial cost and as it has but a few sturdy components, it is economical to service and maintain.

A NEW JUNCTION BOX

The new Motiograph rust-proof junction box may be attached to pipe supports of 2 to 3½″ O.D. without using flanges or threading pipe supports. The transformers, the terminal blocks, light sockets and wiring, are protected by a cover of the same strong lustrous material as the speaker. Boxes are available with or without post standard and concession signal lights.



MOTIOGRAPH SE-7580
LIGHTED JUNCTION BOX
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Arc Lamps



PROVEN ARC LAMPS

Motiograph manufactures three models of proven reflector type high intensity arc lamps:

Motiograph	75/115 ampere	arc lamps
Motiograph	46 ampere	arc lamps
Motiograph	40 ampere	arc lamps

All three models of arc lamps have been proven through installation in hundreds of theatres throughout the world.

MOST LIGHT

The Motiograph HI-POWER 75/115 ampere lamps give more total screen lumens at 85 or 100 ampere operation with better side to center screen light distribution than condenser type lamps operating at 170 amperes when the latter type of lamps employ a heat filter between projector mechanism and arc lamp.

ECONOMY OF OPERATION

Motiograph HI-POWER lamps use 9mm x 20" positive and 5/16 x 9" negative carbons at 85 ampere operation or 10mm x 20" positive and 11/32 x 9" negative carbons at 100 ampere operation. The cost of these carbons per reel of film is considerably less than 50% of the cost of the Super H.I. 13.6 positive carbons used in condenser type lamps at 170 ampere operation.

INITIAL COST

The initial cost of Motiograph HI-POWER arc lamps and their associated 115/230 ampere motor generator runs approximately 50% of the cost of condenser type arc lamps and their associated 250/300 ampere motor generator.

PROVEN ARC LAMPS

Motiograph One K.W. and 46 ampere high intensity arc lamps are giving excellent economical performance in many hundreds of theatres throughout the world. Model 19750 is recommended for screens up to 18 feet in width and Model 19746 for screens up to 22 feet in width.

Motiograph offers models #16200—40 ampere, single phase, four tube, 50 or 60 cycle rectifiers and 16500—50 ampere, 3 phase, four tube, 220 volts, 50 or 60 cycle rectifiers, for use with these lamps, though if preferred, Motiograph HI-POWER 50 volt (27.5 to 40 arc voltage) 70/140 ampere motor generator sets can be used with Model #19746.

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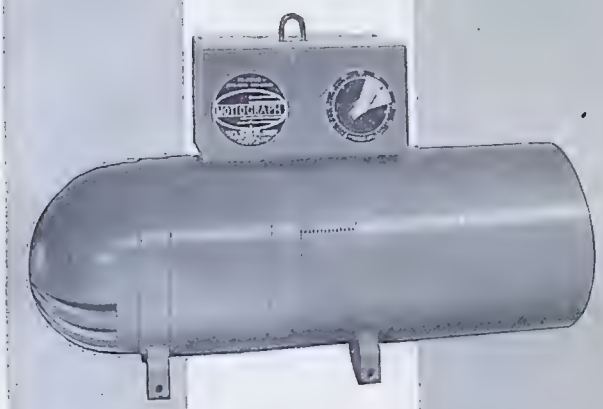
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Hi-Power

MOTOR GENERATORS



GENERATORS—THE PREFERRED SOURCE OF POWER

Motor generator sets have always been the preferred source of direct current for arc lamp service. Experience has proven them to possess great dependability .... high over-all efficiency ... low maintenance cost.

MEETS THE PARTICULAR REQUIREMENTS OF ALL LAMPS

Motiograph HI-POWER generators, especially designed for arc lamp service, are available in two models. Their characteristics can be suited exactly to any make or model of arc lamps operating at between 40 and 125 amperes.

LOW INITIAL AND ULTIMATE COST

These rugged generators are available complete with control panel, ammeter, voltmeter, field rheostat, ballast resistors, starter, start and stop push button and coded leads at prices below any other generators, at prices even lower than those of many rectifiers.

COMPLETE SERVICE READILY AVAILABLE

Service for these generators is available through the Motiograph dealer organization and in over 100 cities in 44 states and 7 Canadian provinces, and in 45 foreign cities.

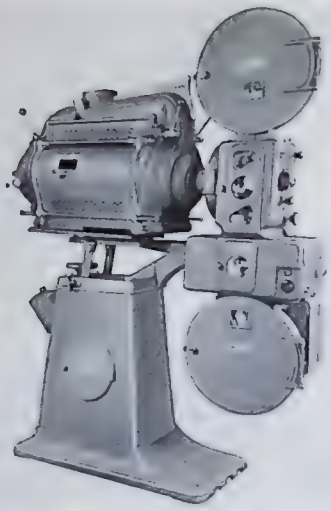
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Modern MOTION PICTURE PROJECTORS...



. . . do not require *oil pumps* and *splash lubrication* for efficient operation.

. . . must be designed to use *high-power arc lamps* without *light-wasting heat filters.*

HERE'S THE PROBLEM

Modern projection demands the use of higher power arc lamps. These lamps create intense heat which causes buckling and distortion of the film. To prevent film mutilation and out-of-focus pictures, some projectors require heavy light-wasting heat filters. These filters waste most of the light added by the higher power lamps.

HERE'S THE SOLUTION

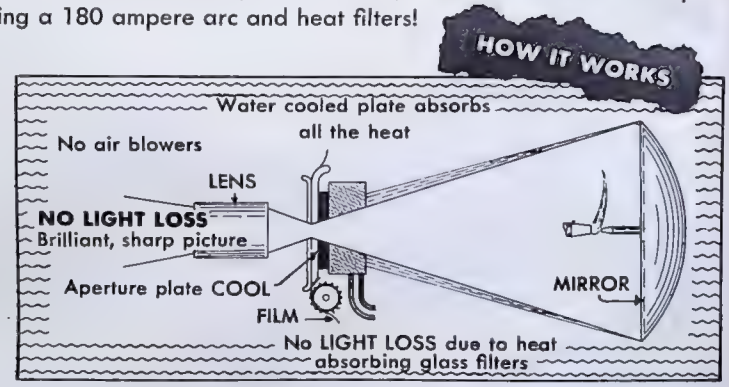
CENTURY projectors equipped with water-cooled apertures reduce destructive heat and increase picture brilliance.

Think of this . . . CENTURY high-efficiency mechanisms, plus water-cooling and with a 90 ampere arc will put as much light on the screen as other projectors using a 180 ampere arc and heat filters!

HERE'S THE RESULT

- Full brilliance and sharper pictures without loss of light or wasted power.
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- Film distortion reduced. Focusing trouble minimized.

Projectors equipped for high speed, long focal length, 4" diam. lenses. Water cooling is optional—available on all models at slight extra cost.

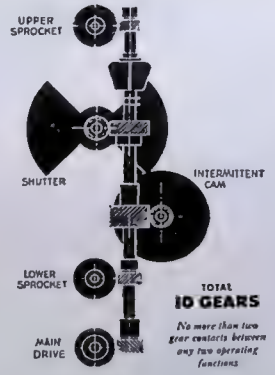


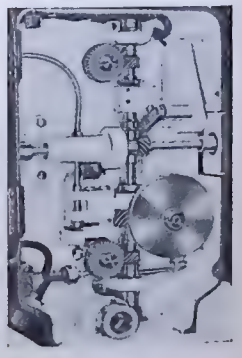
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Fewer gears and shafts mean less trouble, lower maintenance, less vibration, sharper pictures . . . finer projection.





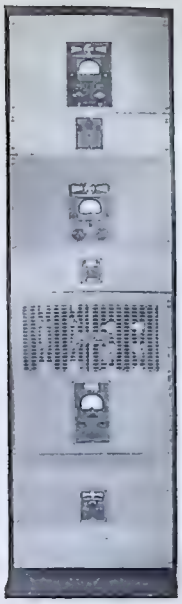
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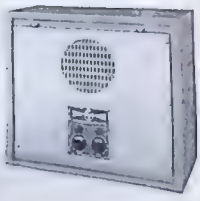
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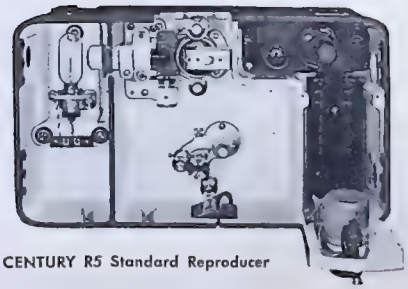


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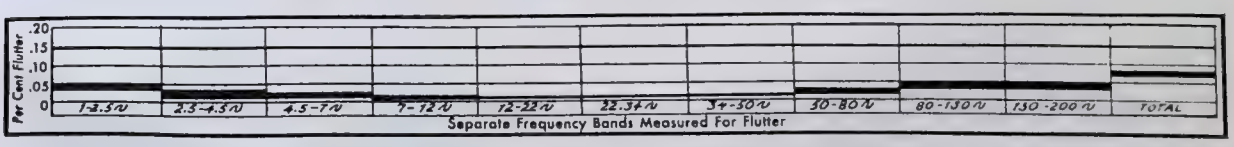
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Maintenance reduced due to simple design.
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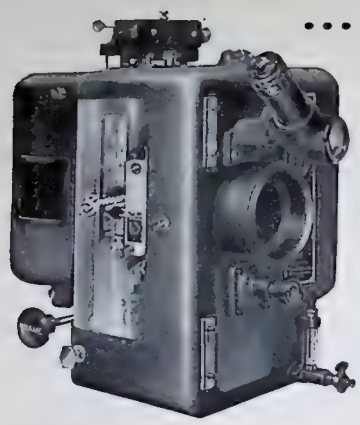


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The Triumph of Projector Perfection...Years-Ahead Features...NOW!



Spray-O-Matic Lubrication

Provides a gentle waterfall of filtered oil over every driving surface without an eye-blink of interruption. Hermetically sealed from film side; no possible oil splash, splatter or seepage. *Another Simplex X-L feature!*

24-Tooth Sprockets

Larger size and 33⅓% decrease in sprocket speed provides wider bend, with better wrap-around of film. Film transit is smoothened; passage of defective and patched film is eased; film breakage is vastly reduced. *Another Simplex X-L feature!*

Film Gate & Trap Assembly

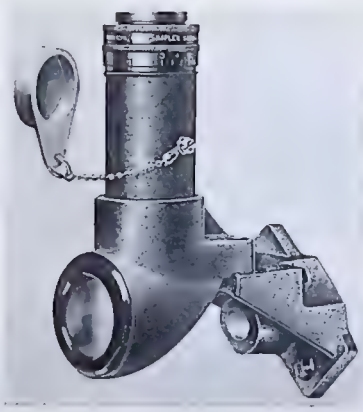
Absolute steadiness! Longer gate reduces shoe chatter. Shoe tension on both film edges is equalized. 5-Step Tension Control attains hair-line accuracy regardless of variance in film thickness. *Another Simplex X-L feature!*

Futura Lens Mount

Provision today for the higher speed, larger diameter lenses of tomorrow. Protects your investment far into the future! *Another Simplex X-L feature!*

Full Vision Observation Window

Entire operating side constantly exposed through clear plate glass—with full length of film path illuminated, and visible from a wide angle or a substantial distance. *Another Simplex X-L feature!*



Micromatic Screenscope

80 Power optic gives projectionist immediate close-up of screen image; guarantees swift, precise focusing, in split-seconds. *Another Simplex X-L feature!*

Frame Lock Indicator

Assures easiest threading of any projector —with constant visible assurance to operator that intermittent movement is in true locked position for correct framing. Instant positive action. *Another Simplex X-L feature!*

Safety Shutter Re-set

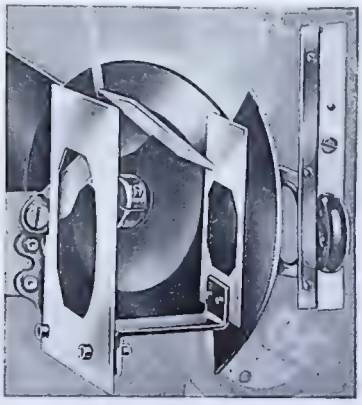
Projection now need not stop when film loop enlarges momentarily. Press a plunger —projector continues to operate as loop is righted. *Another Simplex X-L feature!*

New Style Film Magazines

Large observation window with film footage indicator. No backlash. No contact of reel or film with magazine walls. Takes any size reel hubs. *Another Simplex X-L feature!*

Uni-Tension Takeup

Uniform, self-adjusting tension assures smooth film transit from takeup sprocket to lower magazine, whether reels have 2 or 5 inch hubs, or carrying 17½ or 35 mm film. No cinching or scratching of film; no hooking or uneven wear on takeup sprocket. *Another Simplex X-L feature!*



Single-Unit Conical Shutter

Transmits more light than any shutter ever built, getting sharpest definition without travel ghost. Positioned at narrowest point of the light beam —at the aperture—shortening light-cutoff time. *Another Simplex X-L feature!*

Easily Maintained Cleanliness

Entire mechanism designed to prevent dirt by eliminating corners and crevices where dirt hides. Interior is white porcelainized, brightly lighted. All necessary parts quickly demountable for cleaning between reels. *Another Simplex X-L feature!*

Ultra-modern Simplified Design

Sealed ball bearings and reduction in number of gears, shafts, etc., greatly minimizes friction, enormously decreases wear, simplifies maintenance. It's a projectionist's dream. *Another Simplex X-L feature!*

Reduced Torque and Running Load

Starting load reduced 80%, eliminating gear stripping. Driving load cut 66⅔%, reducing wear, vastly increasing dependability. *Another Simplex X-L feature!*

Built-in Film Changeover

Instant-acting, trouble-free. Not an attachment—but *built-in! Another Simplex X-L feature!*

Super-ficiency Cooling System

Improved cooling reduces film buckling, constantly maintaining better definition. *Another Simplex X-L feature!*

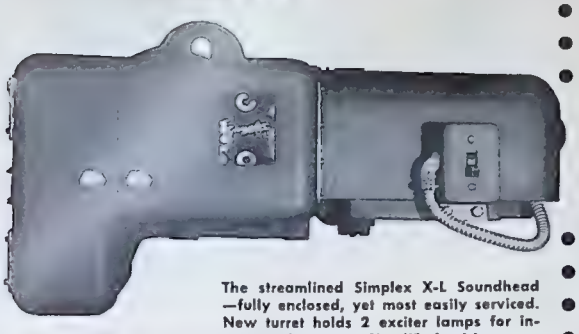
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Simplex X-L SOUND SYSTEM

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The streamlined Simplex X-L Soundhead —fully enclosed, yet most easily serviced. New turret holds 2 exciter lamps for instant replacement. Simplified wiring.

Designed for the future!

Look at it! Listen to it!

Compare with any system—anywhere!



Compact new Universal Cabinet—holds power amplifiers, network and monitor amplifier, and exciter lamp power supply. Each chassis is complete unit, mounted on slide-easy flip-over guides for easy servicing or quick replacement.

Simplex X-L Changeover Cabinet (below)—extremely compact, simplest installation. New positive, inaudible switching. One button simultaneously controls mechanical "on" and magnetic "off".

Monitor Speaker Cabinet—with full 8" speaker, has independent power supply with switchover to stage line for emergencies.



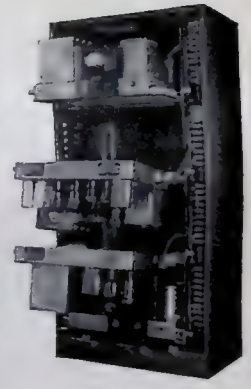


Non-Sync Cabinet—entirely self-contained. Connects projectors and 2 non-synchronized inputs. Includes change-over switch and fader control. Pre-amplifier unit provides replacement for soundhead emergency installation.

NEW FLEXIBILITY—For ANY theatre, large or small—complete adaptability to all present or future requirements; 20 to 120 watts. Power can be increased at any time without change in system—merely by interchanging power amplifier chassis in Universal Cabinet—a matter of minutes.

NEW RESERVE CAPACITY—All components are over-capacity—furnishing a reserve of power which assures substantially longer life and an absolute minimum of maintenance and servicing.

NEW SIMPLICITY OF MAINTENANCE—When servicing is necessary, all parts in all units are accessible quickly and easily. Built-in tube-testing meters and frequency selector switches allow daily testing with greatest convenience. Power chassis in Universal Cabinet slide out like drawers—flip over for servicing—may be entirely replaced in minutes with only a screwdriver. All connections made with spade lugs.



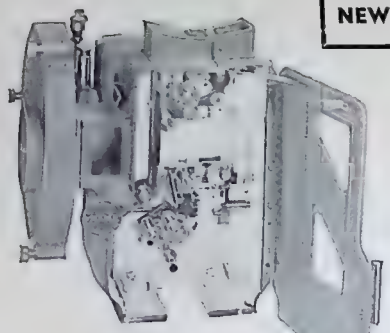
Both top and bottom of each unit in the Universal Cabinet are entirely accessible.

NEW PROTECTION AGAINST BREAK-DOWNS—Only Simplex X-L so thoroughly protects the exhibitor—keeps the show on. Exciter Lamp Turret in soundhead provides instant tube replacement. Pre-amplifier plugs-in in a split second, with "spare" available in non-sync cabinet. Power units slide out without halt in operation. Either power amplifier unit may be used separately. A.C. power is available for emergency. Monitor system operates independently or on system. High or low frequency speakers may be run separately if required. And these are only a few of the protections only Simplex X-L provides!

NEW STANDARDS OF TONE QUALITY—The first modern sound system of entirely new design—therefore far out in front in purity of tone and freedom from disturbance and distortion. Frequency response is flat within one decibel over the full range of 40 to 10,000 cycles. All warping adjustments are made without loss of output. Sound level is constant regardless of line surges. Noise elimination units are built-in. New acoustic filter cap on "Voice of the Theatre" speakers maintain utmost smoothness of frequency response in cross-over region. Your patrons will notice the improvement at once! IN EVERY RESPECT, SIMPLEX X-L SOUND SYSTEM FAR EXCEEDS ALL REQUIREMENTS OF THE MOTION PICTURE RESEARCH COUNCIL.

MANUFACTURED BY INTERNATIONAL PROJECTOR CORPORPORATION • DISTRIBUTED BY NATIONAL THEATRE SUPPLY

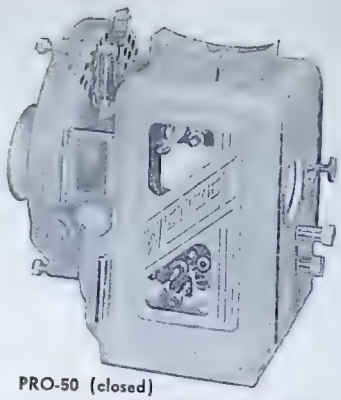
WENZEL'S NEW, 1950 PROJECTOR EQUIPMENT



PRO-50 (open)

NEW PROJECTOR HEAD

Introducing the new, improved PRO-50 mechanism. New lens mount, new streamlined case parts—more room for operating. Oilite bearings throughout.

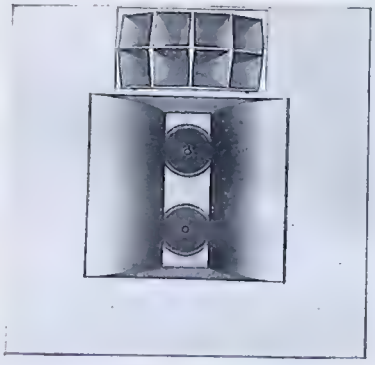


PRO-50 (closed)

COMPLETE PROJECTOR ASSEMBLY

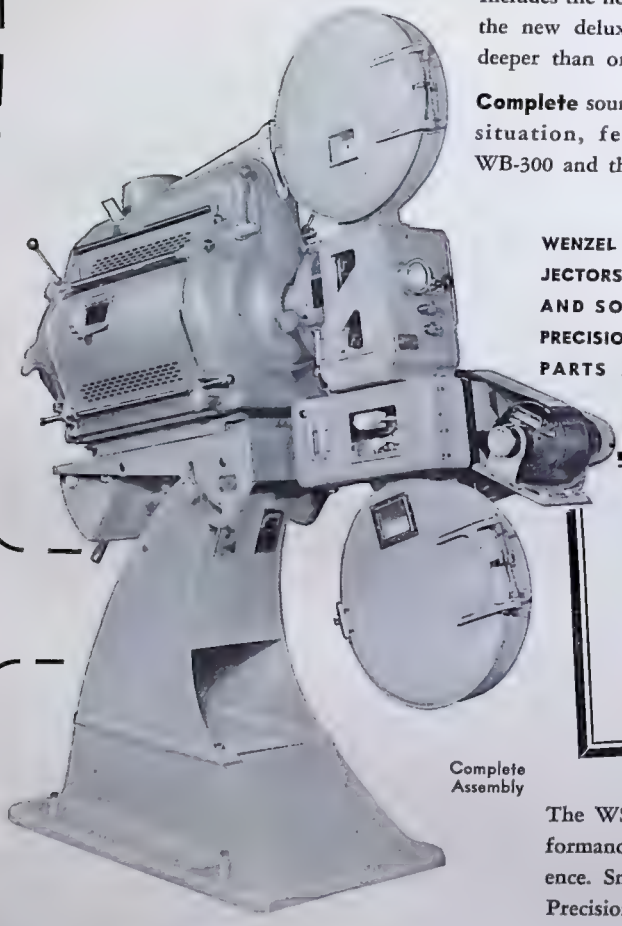
Includes the new BW-600 base and the new deluxe 18" magazines—deeper than ordinary magazines.

Complete sound systems for every situation, featuring the new WB-300 and the WX-46.



WB-300 — Speaker

WENZEL "ACE" 35 M/M PROJECTORS • SOUND HEADS AND SOUND SYSTEMS • PRECISION REPLACEMENT PARTS AND ACCESSORIES



Complete Assembly

WENZEL

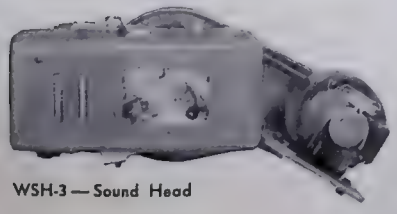
PROJECTOR COMPANY

2505 - 19 S. State Street • Chicago 16, Ill.

Cable: WENZKO

SOUND HEAD

The WSH-3 is the ultimate in performance, permanence and preference. Smart streamlined design. Precision engineered throughout.



WSH-3 — Sound Head

We are actively represented all over the world. Equipment sold only through Independent Theatre Supply Dealers.

Free Literature Available on Complete Line of Equipment Write for it TODAY!



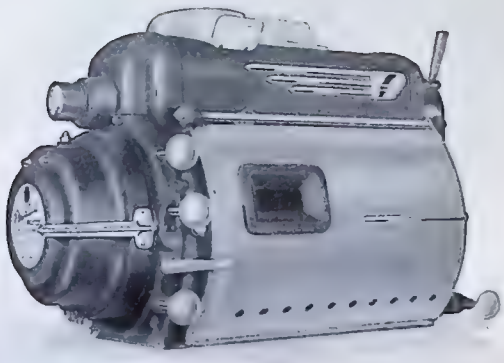
WX-46 — Amplifier

7 out of 10 choose Peerless MAGNARC

TRADE MARK REG.

1-KW TO 70 AMPS

"HY-AX" ARC MAGNET
"HY-LUMEN" REFLECTOR

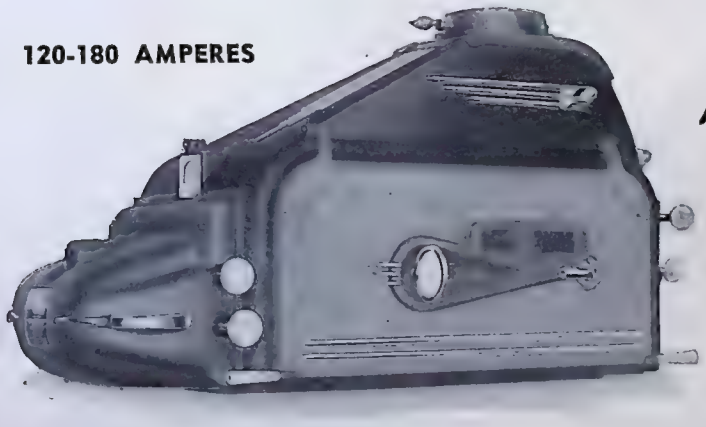


More light at 40 to 70 amperes than ever thought possible. . . . Equals and excels any reflector lamp to 85 amperes, whether they be unapproved water-cooled or resurrected "Hi-Lows". . . . Highest ratio of honest screen lumens per watt consumed at the arc. . . . At 70 amperes, with a *Glass* "Hy-Lumen" Reflector and with a projector having an efficient DISC type revolving shutter, it develops the maximum *white* light that can be used without a heat filter, at *no* risk of film-heat damage. . . . Operating costs under these conditions are far below that of 85-ampere lamps.

Magnarc Lamps assure 80% side-to-center (SMPE Standard) screen light distribution, not a deceptive 60% or "Hot Center." . . . They are all Und. Lab., Inc. listed. . . . They are *not* insurance hazards. . . . They are and have been for years "The Standard of Comparison" and "The First Choice" of large and small theatres, drive-ins, and the motion picture industry in general!

"FIRST WITH THE FINEST"

120-180 AMPERES



Peerless HY-CANDESCENT

TRADE MARK REG.

NEW MAGNETIC STABILIZER

This modern lamp produces all the light there is. . . . It is the standard equipment of the nation's largest and finest theatres. . . . Used by 90% of the largest Drive-In Theatres.

It is the "Omega" for maximum screen illumination. . . . Nothing can even approach it in *white* light volume when used with projectors that have efficient DISC type revolving shutters.

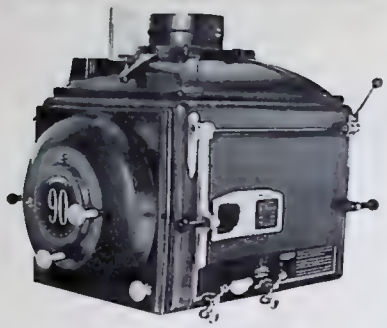
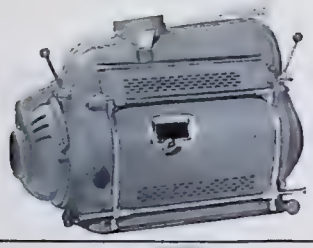
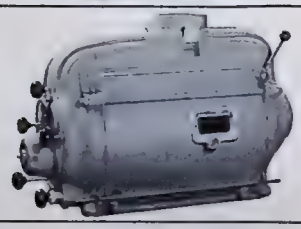
Assures satisfying projection for Drive-Ins regardless of the size of the picture, length of throw, and under all weather conditions. . . . They are Und. Lab. Inc. listed and, therefore, *not* insurance hazards. . . . Heat filter assures *no* risk of film-heat damage at maximum arc amperage and maximum screen lumens.

"WHY EXPERIMENT?"

J. E. McAULEY MFG. CO.

552-554 WEST ADAMS STREET
CHICAGO 6, ILLINOIS

STRONG
PROJECTION LIGHTING EQUIPMENT
A HIGHLY EFFICIENT PROJECTION ARC LAMP FOR EVERY SIZE THEATRE

	Strong Reflector-Type Arc Lamps	No.	Amperage	Lumens Projected With No Shutter	For Screen Widths	Strong Rectifiers Recommended
	Mighty "90" High Intensity with exclusive Lightronic Automatic Focus Control. Forced air cooled feed mechanism. Bi-Metal Lightronic Tube controls both carbon feed motors. Big 16½" reflector. Air stream stabilization of arc.	90000	75-130	21000 at 90 amperes	From 26" up to the largest theatre or drive-in	No. 95000 No. 95001
	Mogul High Intensity	17570	45-70	15000	24' up to 35'	Nos. 16100, 16500, 28100, 28400, 28600, 28700, 28900, 28910
	Utility 1 K.W. High Intensity	14046	45-46	9400	18' up to 26'	Nos. 16100, 16500, 28100, 28600
	Utility 1 K.W. High Intensity	14050	40-42	7000	14' up to 22'	No. 16200 (lamp not sold without rectifier)
	Junior High 1 K.W. High Intensity for portable and semi-portable projectors.	21600	40-42	6000	12' up to 20'	No. 16200 (lamp not sold without rectifier)
	Junior High Intensity for 16mm. projectors.	21000	30	2400	8' up to 15'	No. 26000 (lamp not sold without rectifier)
	Portable Low Intensity	5000	15-18	1200	6' up to 10'	No. 7600 for portable use, No. 6650 for permanent installation

All Strong Lamps (with the exception of the Low Intensity) project a snow-white light of correct characteristics for the proper projection of color as well as black and white film.

When the lamps are **STRONG** *the picture is bright!*

Write today for literature or free demonstration of any STRONG product

THE STRONG ELECTRIC CORPORATION

The world's largest manufacturer of projection arc lamps—the only lamps produced complete within one factory

87 CITY PARK AVENUE — TOLEDO 2, OHIO

STRONG
PROJECTION LIGHTING EQUIPMENT

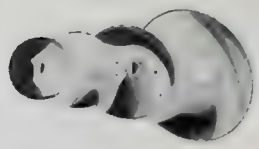
A HIGHLY EFFICIENT PROJECTION ARC LAMP FOR EVERY SIZE THEATRE

A DEPENDABLE RECTIFIER FOR EVERY TYPE PROJECTION LAMP

Smooth Output Current • Long Tube Life • Low Operating Temperature • Flexibility in Control

	Strong Rectifiers	No.	Amperage	Arc Voltage	Phase	Recommended For Use With These Lamps
	6-tube	95000	75 to 90	55	three	Any rotating feed H.I. lamp
	6-tube	95001	75 to 90	55	single	Any rotating feed H.I. lamp
	6-tube	28600	45 to 50	35	three	Any copper coated coaxial H.I. trim
	6-tube	28700	50 to 65	35	three	Any copper coated coaxial H.I. trim
	6-tube	28900	60 to 80	40	three	Any copper coated coaxial H.I. trim
	4-tube	28910	60 to 80	40	single	Any copper coated coaxial H.I. trim
	4-tube	16500	45 to 50	35	three	Any copper coated coaxial H.I. trim
	4-tube	16200	40	27	single	Any 1 K.W. H.I. lamp
	4-tube	16100	45 to 50	35	single	Any copper coated coaxial H.I. trim
	Metallic	28100	40 to 50	35	three	Any copper coated coaxial H.I. trim
	Metallic	28400	45 to 70	40	three	Any copper coated coaxial H.I. trim
	2-tube	7600	12 to 15	55	single	Any low intensity portable arc
	2-tube	6650	18 to 20	55	single	Any low intensity arc for permanent installation
	2-tube	6600	15 to 30	55	single	Any low intensity arc for permanent installation

STRONG REFLECTORS



Since the only light which can reach the screen must be reflected by the mirror, the loss in screen light during the gradual deterioration of a reflector is in direct proportion to the loss in mirror efficiency. Light losses through the use of worn-out reflectors, and amounting to several hundred dollars a year, are not unusual. Endeavoring to make up this light loss through the use of more current similarly represents a pure waste in the form of unwarranted power bills, all of which makes the cost of periodic mirror replacement a good investment. Strong precision reflectors in a variety of types and sizes for use in all standard projector arc lamps have long been recognized as a dependable standard of quality.



THE STRONG TROUPER PORTABLE HIGH INTENSITY A. C. CARBON ARC SPOTLIGHT

Produces a steady, sharp, uniformly illuminated extremely brilliant snow-white spot.
Silvered glass reflector and two-element variable focal length lens system.
Draws only 10 amperes from any 110-volt A.C. convenience outlet. Adjustable, self-regulating transformer, an integral part of the base, makes the use of heavy rotating equipment unnecessary.
Easily operated. Automatic arc control maintains constant arc gap, free from hiss or flicker. A trim of carbons burns one hour and 20 minutes at 21 volts and 45 amperes.
Horizontal masking control. Can be angled at 45 degrees in each direction. Color boomerang contains six slides and ultraviolet filter holder.
Mounted on casters. Easily disassembled for shipping.

Write today for literature or free demonstration of any STRONG product

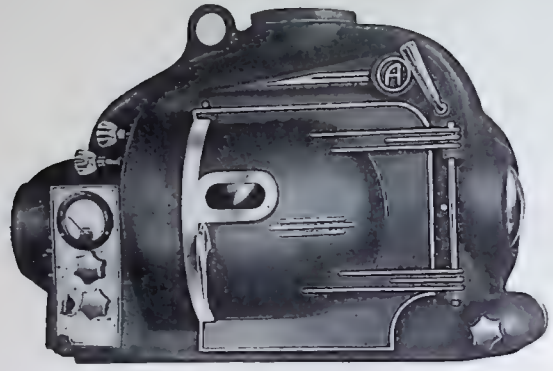
THE STRONG ELECTRIC CORPORATION

The world's largest manufacturer of projection arc lamps—the only lamps produced complete within one factory

87 CITY PARK AVENUE **TOLEDO 2, OHIO**

ASHCRAFT PROJECTION ARCS

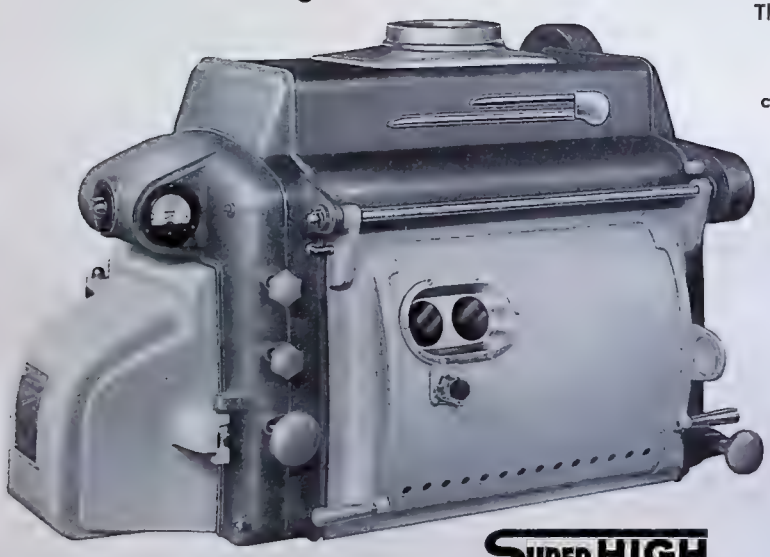
Leaders For Over A Quarter Of A Century



THE FINEST SUPREX ARC

Precision-built projection arc, for theatre screens of any size, employing a wide current range from 40 to 65 amperes, without mechanical changes. High speed optical system produces the maximum light obtainable from Suprex type arcs.

Suprex G70



FOR THE LARGEST THEATRES

The largest theatres operating at only 80-85 amperes are now replacing condenser type lamps using twice the current. Completely water cooled rotating carbon and contact jaws, 16" High Speed Super Brilliant B & L reflector (a new B & L development). A large massive lamphouse. Proven by 18 hour a day grind in DeLuxe Broadway Theatres.

Approved and listed by Underwriters' Laboratory

SUPER HIGH

WRITE FOR LATEST DATA ON THESE LAMPS

C. S. ASHCRAFT MANUFACTURING COMPANY

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INDEPENDENT THEATRE SUPPLY DEALERS

CANADA: DOMINION SOUND EQUIPMENTS, LTD.

FOREIGN: WESTREX CORP.

FOREST-HARRISON RECTIFIERS

More Power Conversion at lower costs


LD.90

Type LD-90

50 to 90 AMPS.

- Full 3-Phase Rectification
- Built also for single phase
- Operates spot lamps up to 90 amps.
- Constant arc current, no flicker
- Built-in remote control
- Power with flexibility
- High efficiency, lower operating costs
- Standard high quality bulbs
- Quiet easy operation
- All-steel case
- Underwriters' listing

Highly advanced 6-tube rectifiers for any size theatre using Suprex or Simplified High Intensity projection. Produces unusually smooth output current beyond the normal requirements of the largest theatres with ample reserve capacity to meet the possibility of increased power demands of the future. Most economical—highest efficiency attainable at lowest possible operating cost. simple in design, sturdily constructed and foolproof in operation.

—ALSO—

TYPE LD-75, 40 to 75 amperes
TYPE LD-60, 40 to 60 amperes
TYPE LD-30, 30 amperes

—ALSO—

Various sizes of Selenium and Magnesium copper sulphide Rectifiers up to 90 amperes

FOREST-HARRISON, Inc.

207 Railroad Avenue, Harrison, N. J.

FOREST *Electronic* ARC LAMP

an achievement of modern engineering

Will out-perform any other lamp



TYPE M — 14" reflector takes carbon trims utilizing from 42 to 70 amperes, produces up to 15,000 lumens on the screen.

TYPE H — 16" reflector takes carbon trims utilizing from 70 to 90 amperes at maximum of 40 volts, produces up to 21,000 lumens.

Guaranteed to out-perform any present projection arc lamp. You will thrill at its perfection of operation and faultless precision of performance and dependability—attains maximum light that can safely be passed through films without buckling —*and at lower amperage.* Saves on electricity. The exclusive *electronic* magnetic arc device holds a stable high intensity arc flame at an arc voltage of 40 volts instead of 60 or more volts required by other lamps. The individually motor-driven positive and negative carbon feeds are *electronically* controlled to assure proper arc gaps and exact proper focus at all times. Burns carbon 1/3 longer, saving 1/4 on carbon costs. Eliminates all the harassing uncertainties which confront projectionists. The improved light output makes it particularly desirable for Drive-in theatres. The savings in operating costs, within a short period more than pays the cost of the lamp.

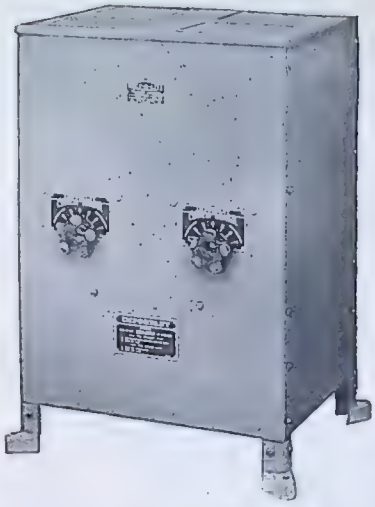
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FOREST ELECTRONIC CO., Inc.

744 Broad Street, Newark 2, N. J.

RECT-O-LITE MOTION PICTURE RECTIFIER

- Produces brilliant and flickerless light on screen.
- Most reliable rectifier on the market. It has no moving parts.
- Rectifying elements are the standard fifteen ampere bulbs, which can be replaced quickly, conveniently and inexpensively.
- Saves enough current to pay for itself. Write us for proof.
- Does not deteriorate with age. RECT-O-LITE maintains its original high effciency during its entire life.
- Has two 7-point control dials for quick regulation of the arc current.

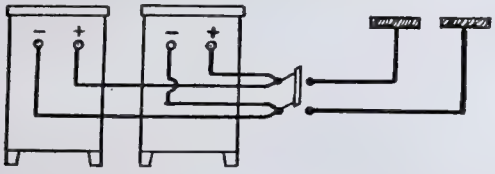


SUPREX RECTIFIER
Models 45 and 60

Guaranteed One Year

MULTIPLE USE SUPREX RECTIFIERS

RECT-O-LITE allows you to GROW without replacing your rectifiers. Note rating of Model 45T below. A perfect rectifier for an intermediate arc; low in price yet it delivers up to 50 amperes. Note our 60T—priced as a 50 ampere rectifier but, when you GROW, change connections and it will deliver up to 60 amperes. When you need still more light, use the output from two rectifiers for one arc. Many drive-in theatres have done it. Connections are simple—note diagram. RECT-O-LITES have wide range of voltage and current. Choose wisely. Buy once—not twice. Grow on the extra capacity of RECT-O-LITE.



ARC

Diagram at left shows Model 60 RECT-O-LITES connected to one Arc. Ideal for Drive-ins. Delivers 70 to 90 amps. at 36 to 50 D.C. volts.

SPECIFICATIONS RECT-O-LITE SUPREX RECTIFIERS

Cat. No.	Case	Price	OUTPUT Volts at Arc	OUTPUT Amps. at Arc	INPUT Volts	INPUT Cyc.	INPUT Ph.	Net Weight	USES
R18	45A	$194.00	27 - 32	35 - 45	230	60	1	205	Intermediate Suprex Arc 35 amperes to 45 amperes. Suprex Arc 7mm. and 6mm. up to 45 amperes.
R20	45T	180.00	27 - 32	35 - 50	220	60	3	205	Intermediate Suprex Arc 35 amperes to 45 amperes. Suprex Arc 7mm. and 6mm. up to 50 amperes.
R24	60A	228.00	31 - 40	35 - 60	230	60	1	265	Suprex Arc 7mm. and 6mm. up to 50 amperes. Suprex Arc 8mm. and 6.5mm. up to 60 amperes. High Intensity Arc up to 90 amperes at 50 D.C. volts—2 rectifiers to 1 Arc.
R26	60T	213.00	31 - 40	35 - 60	220	60	3	265	Spotlight up to 42 amperes at 50 - 55 D.C. volts. Same as 60A.



LOW INTENSITY RECT-O-LITE

The Baldor low intensity RECT-O-LITE delivers 15 to 30 amperes at 50 - 55 D.C. volts. It has heavy duty transformer and large choke coil. This rectifier has plenty of iron and copper which assures reliable operation even on hard, continuous service. Thousands of Baldor 30 ampere rectifiers sold since 1934 are in daily use, performing satisfactorily year in and year out.

SPECIFICATIONS RECT-O-LITE LOW INTENSITY RECTIFIERS

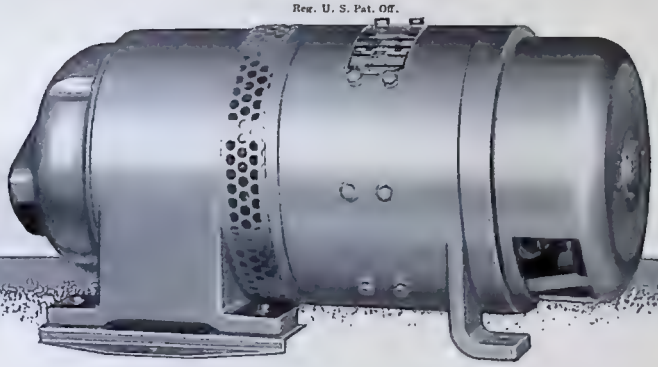
Cat. No.	Case	Price	OUTPUT Volts at Arc	OUTPUT Amps. at Arc	INPUT Volts	INPUT Cyc.	INPUT Ph.	Net Weight	USES
R14	30A	$96.00	50 - 55	15 - 30	115	1	60	107	Low intensity arc up to 30 amperes.
R15	30A	96.00	50 - 55	15 - 30	230	1	60	107	

BALDOR ELECTRIC COMPANY
ELECTRICAL SPECIALISTS SINCE 1920
4351-67 Duncan Avenue St. Louis 10, Mo.

FOR VELVET-SMOOTH POWER SUPPLY

It's the Hertner TransVerteR

Reg. U. S. Pat. Off.



TYPE "HI" TRANSVERTER

for
- ★ DELUXE THEATRES
- ★ SMALLER THEATRES
- ★ DRIVE-IN THEATRES
- ★ AUDITORIUMS

5 TYPES

TYPE "LV" *for Simplex High 1 KW Arcs*

TYPE "HI" *for Suprex Type Arcs*

TYPE "HIH" *for Suprex and Spot Arcs*

TYPE "MA" *for 50-70 Volt Low and High Intensity Arcs*

TYPE "CP" *for 60-75 Volt High Intensity Arcs*

PLUS FEATURES

1. Velvet-smooth power—no A. C. ripple
2. Cool, quiet performance
3. Safe, slow operating speed
4. Economical, long-life, trouble-free operation
5. Modernized, compact, horizontal design
6. Proved experience since 1906
7. Sealed-for-life ball bearings
8. Designed for specific power supply of each installation
9. Easily adjusted ballast rheostats

Distributed by
NATIONAL THEATRE SUPPLY
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Hertner

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A General Precision Equipment Corporation Subsidiary
MOTORS • MOTOR-GENERATORS • GENERATOR SETS

for the *ultimate* in motion picture image quality . . .



BAUSCH & LOMB

BALTAR LENSES for CINEMATOGRAPHY

Leading professional cameramen, who are distinguished internationally for superlative motion picture photography, prefer Baltars. They know that Baltars meet their most exacting needs for 35 mm and 16 mm in black-and-white and color.



BAUSCH & LOMB

SUPER CINEPHOR LENSES for PROJECTION

To cameramen who film process backgrounds, and to theatre operators everywhere Super Cinephor means screen images of highest edge-to-edge brilliance and sharpness.

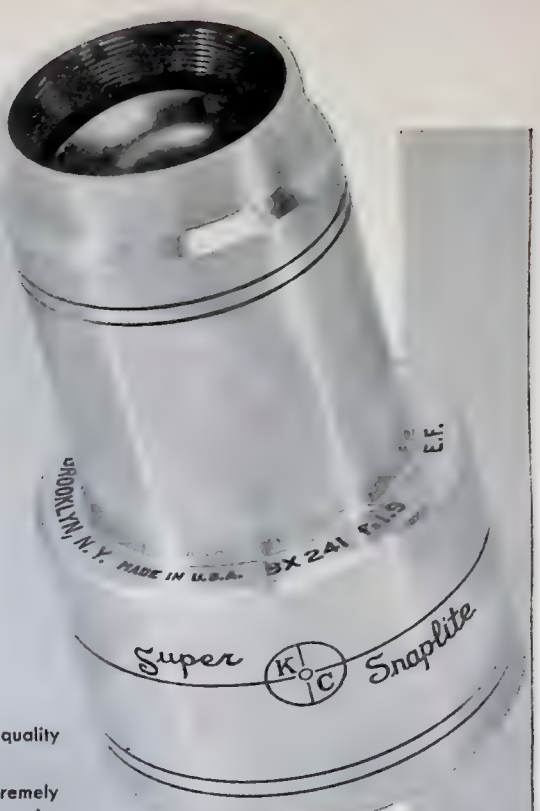
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BAUSCH & LOMB

OPTICAL COMPANY ROCHESTER 2, N. Y.

For Utmost Image Quality

THE f/1.9
SUPER-SNAPLITE
6-ELEMENT ANASTIGMAT



COMPARE THESE ADVANTAGES!

... Six elements for wide-angle, high-magnification, wire-sharp projection!

... magnificent screen brilliance!

... greater light, sparkling contrast!

... trouble-free performance; dustproof, oilproof!

... can't flake off!

Wider-angle projection . . . higher magnification . . . utmost image quality are yours with the spectacular new Super-Snaplite!

Because it's a true anastigmat, the Super-Snaplite produces extremely high magnifications, in short throws, with exceptional detail — gives incomparable image quality in longer throws!

And this superb performance is *permanent* — thanks to the hermetically sealed, one-piece high-strength aluminum alloy mount! The Super-Snaplite is dust-proof, moisture-proof, oil-proof — never needs to be taken apart for cleaning! The anti-reflection coating is hard, durable, too!

Focal lengths range from 2" through 5" in ¼" steps. Speed of f/1.9 is maintained throughout. Get the complete details of the new Super-Snaplite by writing for Bulletin 203!

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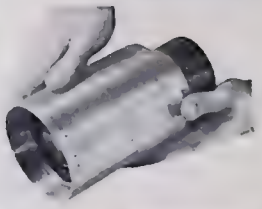


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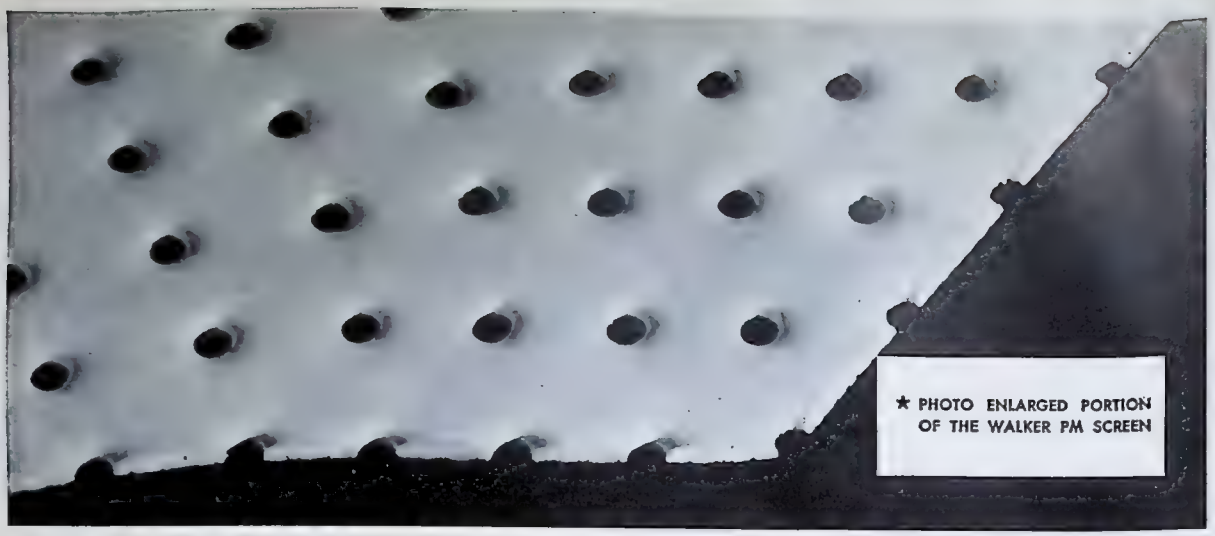
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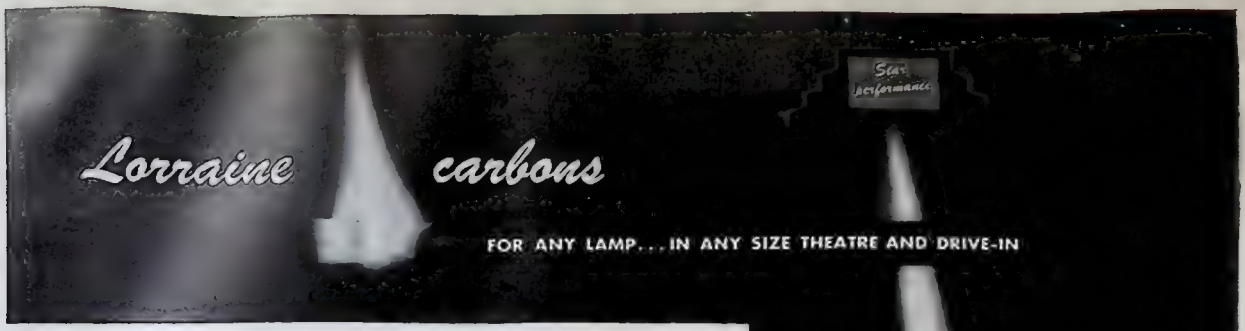
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AMPS.	TYPE		GRADE-DESCRIPTION
30-40	POS.	6 mm. x 12"	544C SC-CC
	NEG.	5 mm. x 9"	545C C-CC
40-50	POS.	7 mm. x 12"	544C SC-CC
	POS.	7 mm. x 14"	544C SC-CC
	NEG.	6 mm. x 9"	545C C-CC
50-63	POS.	8 mm. x 12"	544C SC-CC
	POS.	8 mm. x 14"	544C SC-CC
	NEG.	7 mm. x 9"	545C C-CC
62-72	POS.	8 mm. x 12"	544C-10 SC-CC
	POS.	8 mm. x 14"	544C-10 SC-CC
	NEG.	7 mm. x 9"	545C C-CC
65-75	POS.	9 mm. x 14"	544C SC-CC
	NEG.	8 mm. x 9"	545C C-CC

THE ARC LENGTH 5mm RECOMMENDED VOLTAGE FOR ABOVE TRIM 30 - 35 VOLTS

70-85	POS.	9 mm. x 20"	552	SC-UNC
	NEG.	5/16" x 9"	557C	CC
85-100	POS.	10 mm. x 20"	282	UNC
	NEG.	9 mm. x 9"	557	CC
95-115	POS.	11 mm. x 20"	552	UNC
	NEG.	8 mm. x 9"	557	CC
	NEG.	9.5 mm. x 9"	557	CC

ARC GAP CONFORM TO MANUFACTURING DATA RECOMMENDED 50 - 60 VOLTS

105-115	POS.	13.6 mm. x 22"	552	UNC
	NEG.	7/16" x 9"	557C	CC
130-160	POS.	13.6 mm. x 22"	553	UNC
	NEG.	1/2" or 9"	556C	CC
		7/16" x 9"	557C	CC
150-180	POS.	13.6 mm. x 22"	581	UNC
	NEG.	1/2" x 9"	555CN	CNC

ARC GAP CONFORM TO MANUFACTURING DATA RECOMMENDED 50 - 70 VOLTS

10-15	POS.	10 mm. x 8"	252	S-UNC
	NEG.	7 mm. x 8"	259	S-UNC
15-20	POS.	12 mm. x 8"	252	S-UNC
	NEG.	8 mm. x 8"	257	S-UNC
20-30	POS.	13 mm. x 8"	252	S-UNC
	NEG.	9 mm. x 8"	256	S-UNC

SC: Star Cored — UNC: Uncoppered
CC: Copper Coated — CNC: Copper Nickel Coated
C-CC: Cored—Copper Coated — S-UNC: Solid—Uncoppered
C-UNC: Cored—Uncoppered

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Type of Lamp	Type of Carbon	Size	Maximum Recommended Arc Current Amperes	Arc Volts	Maximum Screen Lumens 90° Shutter	Maximum Screen Width with 9 Ft. Lamberts at Center— 75% Screen Reflectivity
Condenser Type	High Intensity Positive "Orotip" Cored Negative	13.6 mm x 22 in. ½ x 9 in.	150	78	9750	38.2
	"Hitex" Super High-Intensity Positive Heavy duty "Orotip" Negative	13.6 mm x 22 in. ½ x 9 in.	180	74	12,400	43.2
Simplified High Intensity	Suprex Cored Positive Suprex Cored Negative	7 mm x 12 or 14 in. 6 mm x 9 in.	50	37	5000	27.2
	Suprex Cored Positive Suprex Cored Negative	8 mm x 12 or 14 in. 7 mm x 9 in.	70	40	7000	31.6
"One Kilowatt D.C. Arc"	Suprex Cored Positive "Orotip" C. Negative	7 mm x 12 or 14 in. 6 mm x 9 in.	40	27.5	3250	21.9

**(All data based on use of F/2.0 treated projection lenses)*

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HIGH INTENSITY PROJECTION

The history of screen lighting, even from the beginning, has been one move after another to obtain more and better light. High intensity projection has always produced enthusiastic response from theatre patrons, since they notice and show favorable reaction to the improvement resulting from installation of this type equipment.

High intensity lamps provide a greater volume of screen light than the older low intensity lamps. This allows a clear cut screen image to be shown in the presence of a safe and comfortable level of general illumination. Patrons entering the auditorium from the lobby find their seats without discomfort or embarrassment, while the lighter contrast between the screen and surrounding illumination adds to visual comfort in viewing the picture.

A further advantage of the high intensity arc for projection is the snow white quality of its light. Light from the low intensity arc is comparatively dull and yellowish. This distorts the hues of color features and detracts from the impression of realism which color is designed to create. High intensity projection reproduces all colors with great fidelity and gives a realistic quality to color features not otherwise obtained.

"ONE KILOWATT" ARCS

From the standpoint of the small theatre, the "One Kilowatt," carbon arc ranks among the most important advances in the art of motion picture projection. It enables the smallest theatre, at little or no increase in operating cost, to have the advantages of snow white projection light and the recommended level of illumination on the screen. It removes the edge enjoyed by those theatres having the more expensive types of high intensity lamps.

One of the most important objectives in preparing for future business is improvement in the quality and quantity of screen illumination, especially since increased production in color films is expected. No theatre will be a modern theatre without high intensity projection.

The "One Kilowatt" arc, without increasing operating cost, now allows the small theatre to give its patrons 50 to 80 per cent more screen light, more realistic color reproduction, and a quality of picture presentation unsurpassed by any theatre, regardless of size.

HEATING, VENTILATING *and* AIR CONDITIONING

1949-50

Practical Observations on Theatre Air Conditioning, Heating and Ventilating

A Summary of the Available Methods and Accepted Practices in Theatre Buildings

AIR CONDITIONING

Editor's Note: Reams of paper have been filled with writing about the general . . . and rapidly expanding . . . subject of humidity control . . . from both the viewpoints of public demand and scientific achievement . . .

Each individual patron has a different reaction to temperature changes . . . so it is beyond the realm of possibility to satisfy each of them in the same way . . . The best goal to hope for is the attainment of a happy medium . . . which will make the average customer feel reasonably comfortable in both summer and winter . . .

Certain methods and practices . . . which have been found to be the most practical and easiest to put into effect in a variety of theatres . . . have evolved to become accepted as sound guides for managers, maintenance engineers, and designers . . . Every theatre has different problems but the following suggestions should have general applicability in a majority of houses.

Therefore due to the great variance in the same degree of cooling, humidity, motion and air movement affects different individuals, the layout and engineering for an air conditioning system in a theatre should have the careful consideration of an engineer who has had considerable experience in this special application.

It is not the intention in this survey to lay down any strict rules which should be followed for every situation, as each theatre will, in general, present many different problems, and can have several different satisfactory solutions.

Some localities have code provisions which govern installations mostly, specifying the amount of air per seat to be supplied or exhausted. The fresh air must, of course, be conditioned—namely, cooled and dehumidified—and if these codes are followed to the letter, the size and cost of the equipment would in some cases be prohibitive. Sometimes it is necessary to install exhaust fans and ducts of sufficient capacity to exhaust as much as 50 cubic feet per minute per seat but their operation is enforced only at times of real or impending epidemics in that particular locality.

Whether or not it is required by code, a sufficient supply of fresh air should be introduced into the system to dissipate body odors and to maintain the proper balance between the fresh and recirculated air which will give a pleasant reaction on entering from the outside.

The question of zoning is one which has not been given enough consideration by most engineers. By zoning is meant dividing the theatre into distinct areas, such as the top of the balcony, stadium or mezzanine, the area under the balcony soffit, the standing room area, and the lobbies, in fact each area which is subject to different conditions and occupancy, and conditioning such spaces separately, with individual controls, and in some cases using individual cooling and heating coils and fans.

In any case, it will always be found advantageous to separate the lobbies from the seating areas, and in many cases it will be found much more satisfactory to install a small complete unit for the lobbies, toilets, and so forth, entirely separate from the large system used for the theatre proper.

Conditioned air should be introduced from the ceiling of the auditorium area and exhausted at the floor. For the best distribution, the recirculated air should be exhausted through a series of grilles located near the floor along the side walls of the auditorium. In some cases this method will be impractical because of conditions, in which instance the grilles should be located in the base of the standee rail and in the facia of the stage. Exhaust grilles at the front or stage end of the auditorium are mandatory to remove the cold air from the floor during the heating season.

Capacity Required

The total refrigeration capacity required to provide the average theatre with comfortable cooling and humidity control at all times, namely, when the dry- and wet-bulb temperatures are the greatest and at full capacity of the theatre, is approximately 0.075 ton per seat. The comparative size of the lobbies, foyers, and so forth in relation to the auditorium, together with the outside exposures and the construction of the exterior walls and the roof, are variables which should be taken into consideration in the final design of the air-conditioning equipment.

Dampers

For in between seasons when either cooling nor heating is used, provision should be made for dampers which can be adjusted to supply the maximum amount of fresh air, and for direct exhaust, without recirculation. Such an arrangement will save the necessity of using the refrigerating cycle and will produce savings in natural energy and water consumption. It will also be found, that with the exception of the hottest and most humid days, the above arrangement will permit turning off the refrigeration cycle from one to two hours before the house is opened thereby effecting additional savings in operation.

The same damper system should also permit the complete closing of the fresh air intake and full opening of the recirculation dampers, so that 100 per cent recirculation can be effected when the equipment is first put in operation before show time. This arrangement will permit cooling down the house much more quickly. With this initial gain before the house is opened it is much easier to maintain the proper conditions during the balance of the day.

Well Water System

Before starting the design of the air-conditioning equipment the engineer should determine whether or not a supply of well water is available at the site, with information as to the approximate depth required for a well, the temperature of the water, and the quantity of water available.

Well water below 55 degrees Fahrenheit in sufficient quantity will furnish a cooling source which will produce very satisfactory results in most climates, especially where the average relative humidity is low. If the supply of water is limited, it may be used for the first stage of cooling, in conjunction with mechanical refrigeration. Such a combination will result in a less expensive installation and also less operating cost over a period of years.

In case available well water is not of sufficiently low temperature for cooling it can still be used for the condensors, at a saving over using city water or evaporative condensors, depending, of course, on whether such water is available near the surface where the cost of the well would not be prohibitive.

If well water is available in sufficient quantity and low temperature (55 degrees Fahrenheit or lower), a mechanical refrigeration can generally be dispensed with and the cool water used as the cooling medium by circulation through the proper type of coils and

roof sprays. In such cases it will generally be found more economical to use hot water for heating instead of steam, and the use of one set of coils for both cooling and heating. Although the size and number of rows of coils (not less than six) required for the cooling cycle will be much greater than required for heating, passing the hot water through the coils in the same direction as the air stream, and the cold water in the opposite direction, or against the air stream, will produce very satisfactory results.

At this point it is well to point out that the temperature of water which can be expected from a well in any locality will in most cases be approximately the same as the temperature of the ground at the depth of the well, and this temperature will be very close to the average yearly temperature of the particular locality; also that, even with water at the maximum recommended temperature of 55 degrees Fahrenheit, there will be several periods in the cooling season when it will be impossible to obtain ideal conditions in the theatre. These will be the periods when a combination of high relative humidity, high dry-bulb temperature, and a full house occurs. However, the saving in the original cost of the installation and the cost of operation, will in many cases recommend this type of equipment.

In order to determine whether or not a well of sufficient amount of water at the proper temperature is available, a reliable well contractor should be consulted. If the water is available, he will no doubt have records on other wells in that particular vicinity, and from such data it can be determined whether or not it is worth the gamble to drill the well, as only in a few instances will the well contractor guarantee the amount of water and also the temperature. Under some conditions it is even recommended to drill a test well for exploration purposes. If it is found that insufficient water, or water at too high temperature only is available, such a well can then be used for condensor cooling water and spray cooling of the theatre roof.

Evaporative Condensors

A mechanical condensing unit will require approximately 1½ gallons of water per minute per ton of capacity, or, in other words, a 75-ton mechanical refrigeration plant will require roughly 110 gallons of water per minute at 70 degrees Fahrenheit which is 6,600 gallons per hour, and approximately 6,600-000 gallons of water in an average 1,000-hour season. If well water or water from some other cheap source is not available, and it is necessary to use metered city water for condensing purposes, it is evident that the cost of this item will in many cases be prohibitive. In such cases it will pay the owner to install cooling towers, a spray pond, or evaporative condensors, all of which reuse the condensing water, requiring only sufficient make-up water to replace the small amount lost by evaporation. Which one of the above three means should be used will be governed by local conditions, but it will generally be found that the evaporative condensor will be the most satisfactory for this special application.

This equipment can be installed either outside (see illustration), or may be located in the machine room or elsewhere in the building, requiring only that duct connections can be made to the outside air, one for fresh air and one for discharge. The additional cost of this equipment will be recovered in a few seasons of operation by the savings in water costs.

In addition to the cooling methods mentioned above, still another method is available and practical under certain conditions, that is, the cooling of the air with chilled water which is kept at the proper temperature by circulating it over cakes of ice. The air is cooled directly either by coils or by spray type cooler. Ice is stored in an insulated bunker and is raised out of the water on a rack or platform with sprays overhead to flow the return water down over the ice surface. (See illustration.) This is by far the most effective arrangement for ice air conditioning, but, unless a temperature controlled by-pass is used, wasteful over-cooling will result at the start of the cycle.

A complete temperature and humidity control system for the conditioned area must, of course, be designed as with any other means of refrigeration and may be as simple or as elaborate as desired.

As previously stated, this type of system is not recommended for every situation and should be considered primarily only in such localities where there is a dependable source of ice at low cost. The system also is not practical for a theatre which is expected to operate on a continuous policy. However, in some smaller communities, where only one or two matinees, and one show at night is contemplated, the savings in the cost of the original installation and low operating cost may recommend this type. As is true with the other more complicated mechanical systems, experienced engineering will mean the difference between satisfactory and unsatisfactory operation.

HEATING AND VENTILATING

The heating plant of a theatre, the location of which has been previously discussed, can be of several different types and applications. The source of the heat can be coal. oil, gas, and, in some isolated instances, street steam.

AIR DISTRIBUTION is an important part of any cooling or heating installation. Distributed through ceiling outlets and expelled at several places near the floor, a draftless and even temperature will result. There are no "hot-spots" or "cold-spots" in such a theatre interior as this one.



The decision as to which one to use will be influenced by the cost of installation together with the cost and availability of the fuel in the particular vicinity. The one which is the most practicable should be used.

In case coal is indicated as the most economical fuel, the heating plant can be designed for either hand or stoker firing.

Even though stoker firing equipment will mean an additional expense in the first instance, it will be found much more satisfactory in operation on account of the variation in the theatre occupancy which causes a corresponding variation in the heating load. With the proper thermostatic controls, these demands can be anticipated and a more even, as well as desirable, condition in the theatre will result.

It is impossible, with hand firing to satisfactorily regulate the fire unless it is given almost constant attention. This kind of service will seldom be found available in theatres of small seating capacity. However, the frequent selling point in favor of stokers claiming such an installation will save on labor costs is not necessarily true, as even a plant equipped with a stoker—oil burner or gas burner—will require a certain amount of daily attention by some member of the theatre staff definitely assigned to that particular job.

Gas or oil-burning equipment should be equipped with thermostatic controls for the proper regulation of the heating required under the different demands.

The heating apparatus can be hot air type, hot water, or steam. In case of one of the two latter types, distribution of the heat can be by means of either direct or indirect radiation.

The hot-air furnace is supplemented by a circulating blower which draws the outside and recirculated air over the heating bonnet and by means of necessary mixing dampers delivers the air at the correct temperature through a system of ducts and diffusers to the theatre. This is a very satisfactory method and most frequently the least expensive of any system for heating the theatre auditorium. However, it has one drawback of not being able to supply a small amount of heating necessary in the toilets, offices and so forth when the theatre is closed, without the necessity of constant operation of the fan. This fact also applies to any commercial portion of the building which will require full heating at times when none, or very little, is needed in the theatre. This difficulty can be overcome by installing a small blower on a separate duct system to service these areas, or better still, a separate hot water or steam heating system for this purpose.

The only time a circulating hot-water system is recommended would be in the event that deep well water is to be used for cooling, in which case the same extended fin coils can be used for the hot water heating in the winter and for cooling and dehumidification in the summer.

The most satisfactory heating installation is a steam boiler, either stoker, oil burner, or gas fired, supplying steam to coils for indirect heating of the larger public spaces in the theatre and to direct radiation for the toilets, offices, service rooms and commercial sections of the building.

The outside air and the recirculated air are mixed and forced by a blower, through a system of ducts to the proper locations in the auditorium ceiling or side walls to produce an even temperature in all parts of the house without noticeable drafts. The layout of such a system cannot be a hit-or-miss proposition and should have the attention of an experienced engineer who is familiar with this particular kind of a problem. Most modern theatres will be equipped with full air conditioning facilities and the duct system will be designed to distribute the proper tempered and conditioned air at all times.

If it is necessary to cut the costs of the heating installation, the use of unit heaters on either side of the proscenium arch will do a very satisfactory job provided the auditorium is not too deep. There will always be a certain amount of noise created by a unit heater which increases with the fan velocity for the required throw.

A few special items for the safe and continuous satisfactory operation of a theatre heating system include a low water cut-off on the boiler. This is an Underwriters' requirement and its omission will mean a penalty on the insurance rate of the building and contents.

Unless there is a basement under the entire orchestra floor, which is rarely the case, it will be necessary to construct a tunnel or trench for the steam return lines. These lines should never be buried under the floor where they are not easily accessible, as they will eventually have to be dug up and replaced. The tunnel will generally serve a dual purpose as a return air duct.

At the entrance doors, especially in the colder climates, install booster heating coils with a small blower or blowers to force hot air across the inside face of these doors. This will greatly assist in heating the lobby, and in many cases is the only way of keeping cold drafts from the occupants of the rear seats.

If no return air system is installed and the seating in the top of the balcony, stadium, or mezzanine is close to the ceiling, relief grilles should be installed, connected to roof ventilators, to take the hot air away from this area. The operation of these ventilators should be controlled by easily adjustable dampers.

WALL-TYPE DIFFUSERS as found in the Luna Theatre, Chicago, Ill., combine well with distinctive lighting fixtures to produce modern design effects and satisfactory air-distribution results. This and the foregoing photograph are through the courtesy of Anemostat Corporation.



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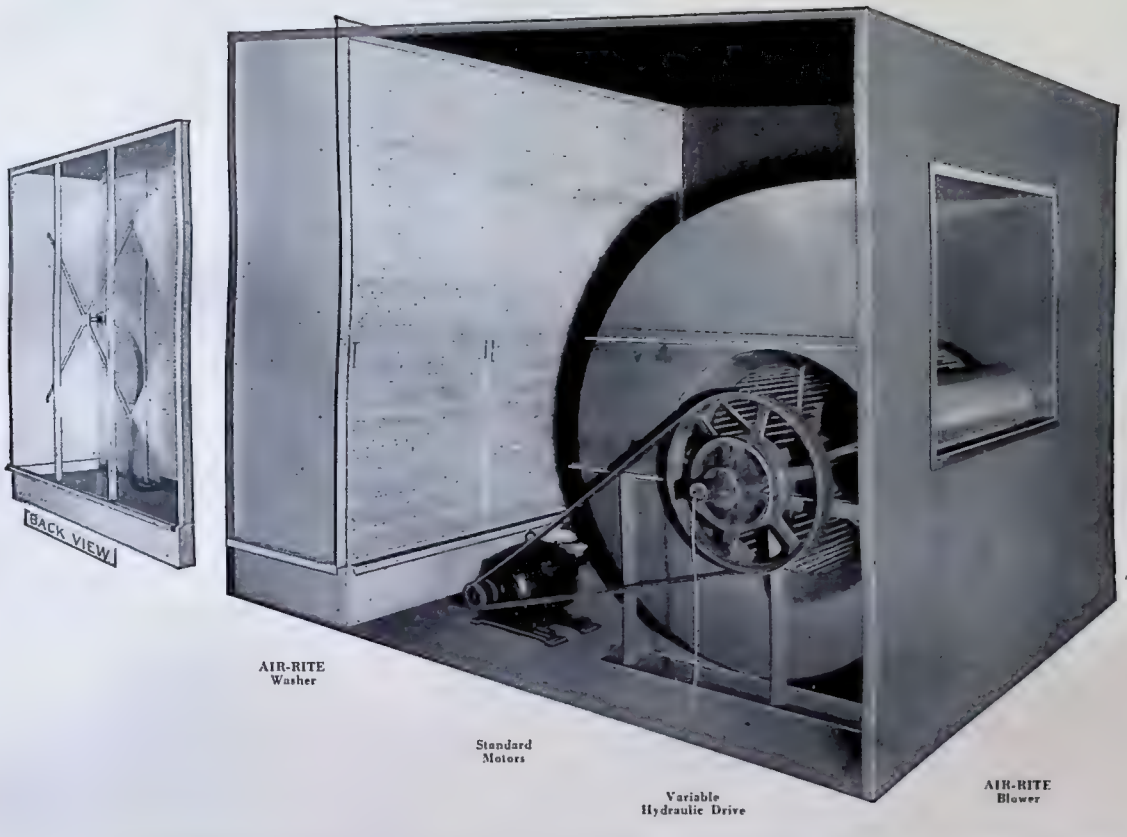
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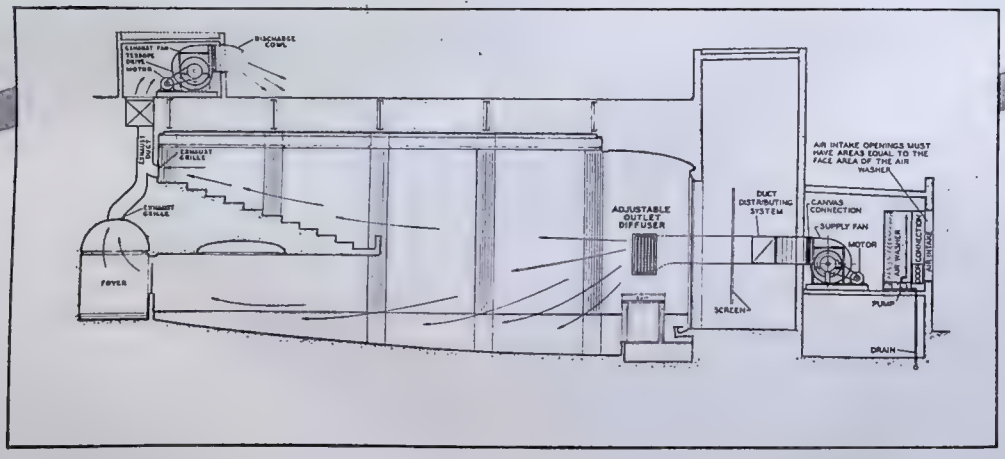


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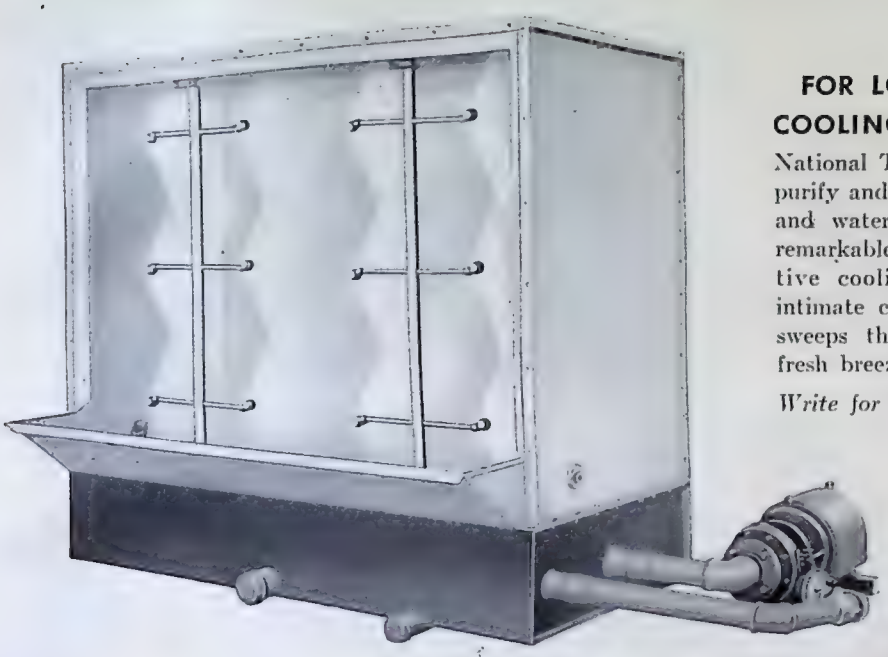
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National Theatre Air Washers cleanse, purify and freshen the air, remove dust and water-soluble odors, and have a remarkable cooling effect (by evaporative cooling). Air is brought into intimate contact with water and then sweeps through the theatre like the fresh breeze that follows a rain.

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Thousands already in use

PROJECTION ROOM EXHAUST FAN

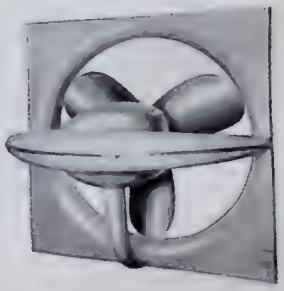


Utility Set with Aileron Control for duct systems.

Exhaust heat, odors and bad air from projection rooms, toilets, offices, locker rooms, lounges and dressing rooms with this compact, quiet-operating Utility Set. It is an ideal unit when ducts are necessary to handle air.

The Utility Set has a direct motor drive with steel housing and motor pedestal. All housings are adjustable for direction of discharge. Larger sizes are equipped with patented Aileron Control which provides a better, more efficient method of regulating the air flow. *Write for Catalog No. 1129-32 for complete data.*

GENERAL PURPOSE EXHAUST FAN



New Model A Ventura Exhaust Fan

Rid theatre foyers, toilets and other areas of bad air with a new Ventura Exhaust Fan. Placed on an outside wall, this efficient fan readily exhausts bad air by changing the air quickly and quietly—at a cost that's surprisingly low.

Note these outstanding features: Modern two-tone styling; square mounting panel, easily installed; streamflow motor enclosure; smooth, easy-to-clean surfaces; no exposed wiring; streamlined inlet for power savings; Aerocurve 3-blade propeller; Certified Ratings in accordance with Standard Test Code; sound rated. *Write today for Catalog No. 1129-34.*

Distributed by

NATIONAL THEATRE SUPPLY
Division of National • Simplex • Bladeworth, Inc

A UNIT OF NATIONAL STANDARD THEATRE SUPPLY EQUIPMENT

REYNOLDS

BLOWERS

For cooling and ventilating. May also be used as an exhaust as well as with washed air, refrigeration and cold water coil systems.

Blades are self-oxidizing aluminum. Never rust. (Blowers with steel blades also available at lower prices).

Fafnir ball bearings set in solid rubber pillow blocks. No lubrication necessary.

Quiet running. Rugged construction throughout.



Belts and motor pulleys included. Variable speed friction drive $10.00 extra. Motors extra. Unless specified, regular single speed drive will be furnished. All prices F.O.B. Grand Rapids, Michigan. 10% extra for crating for export. Specifications subject to change in the interest of improvement.

	MOUTH	HEIGHT	SHAFT	C. F. M.	WHEEL DIA.	DEPTH	PRICE	WGT. LBS.	H. P.
Master 36	36½" x 29½"	57"	45"	30,000	36"	52"	$290.00	458	3 or 5
Master 32	36½" x 25¾"	52"	45"	20,000	32"	48"	190.00	330	2 or 3
Model X	24½" x 29½"	57"	35"	22,000	36"	52"	250.00	440	2 or 3
Model M	24½" x 25¾"	52"	35"	12,500	32"	48"	175.00	271	1½ or 2
Model G	24½" x 23½"	51"	35"	10,000	30"	44½"	150.00	260	1 or 1½
Model F	24½" x 21"	48"	35"	7,500	24"	35"	102.50	245	¾ or 1
Model A	24½" x 15"	34½"	35"	5,000	21"	30¼"	82.50	195	½ or ¾

Dealer Inquiries Invited

REYNOLDS MANUFACTURING COMPANY

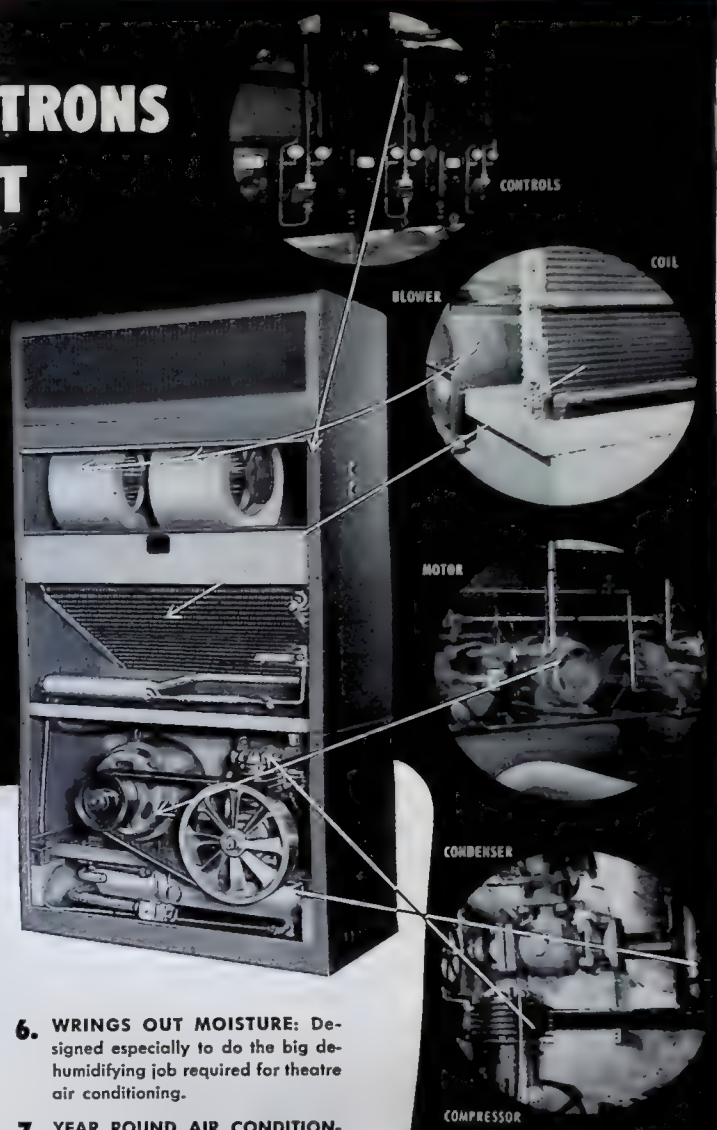
412 PROSPECT AVENUE N. E.
GRAND RAPIDS, MICHIGAN

Cools MORE PATRONS *at* LESS COST

TYPHOON

PACKAGED AIR CONDITIONERS

give you all the benefits of a costly central plant system with none of the disadvantages Furthermore, by distributing cool air at the audience level only, Typhoon eliminates the big waste factor of cooling the air near the ceiling. For practical, efficient, thrifty air conditioning, plan on Typhoon!



TYPHOON'S 9 POINTS TO BETTER AIR CONDITIONING

1. **CHEAPER TO BUY:** Up to 25% lower initial cost than central plant system.
2. **CHEAPER TO OPERATE:** No waste cooling of upper area, no loss in ducts. Thermostats turn off individual units when not needed.
3. **FASTER TO INSTALL:** No walls to tear down, no ducts to build. Can be in operation in 5 days.
4. **ZONE CONTROL:** Individual thermostats maintain even temperatures in every part of the house.
5. **SUPPLEMENTS YOUR PRESENT SYSTEM:** Where present system is inadequate, unit may be added for auxiliary cooling.
6. **WRINGS OUT MOISTURE:** Designed especially to do the big dehumidifying job required for theatre air conditioning.
7. **YEAR ROUND AIR CONDITIONING:** With the addition of heating coils, the unit may be used for perfect winter conditioning.
8. **RUGGEDLY ENGINEERED:** Oversize parts insure full-rated capacity. Factory-tested features add up to trouble-free performance.
9. **QUIET OPERATION:** Sound baffled cabinet, low speed compressor and floating spring base eliminate noise, vibration.

Write for a suggested plan for your theatre.

A *Complete* AIR CONDITIONING SYSTEM

All the elements of a costly central plant in a compact unit!

Units: 7½ to 20-ton—a size for every type of theatre.

TYPHOON AIR CONDITIONING

TYPHOON AIR CONDITIONING CO., INC.

794 UNION STREET BROOKLYN 15, N. Y.





PHOTOS COURTESY METRO-GOLDWYN-MAYER

FROM "The Big Parade" TO "Battleground"

Twenty-five years of making movies more fun to go to

Way back when John Gilbert was teaching Renee Adoree how to chew gum, we were chewing over our first theater air conditioning problems. Since then, we've kept millions of moviegoers cool (if not calm) through every sort of cinematic crisis. In these twenty-five years, we've pioneered such comforting triumphs as those shown below. Maybe, after you've read the short outlines, you'll want to book one of our productions into your house soon.



usAIRco Refrigerated Kooler-aire

Here's your complete air conditioning plant in less space than your refreshment counter takes. Arrives all ready to operate. Three simple connections install it. Needs no roof tower. Saves up to 95% on water consumption. Sizes from 3 to 40 tons capacity.



usAIRco De-hu-matic

Here's inexpensive evaporative cooling with all the unpleasant dampness taken out. De-hu-matic's automatic humidity controls maintain nature's own atmospheric balance. Unit is simplicity itself . . . no coils, no condensers, no compressors.



usAIRco Upright Air Conditioner

Cools your whole theater without an inch of costly ductwork. Filters, dehumidifies, circulates. Heats in winter with addition of an inexpensive heating coil. Three, five and seven and one-half ton capacities. Units up to five tons guaranteed for five years.

UNITED STATES AIR CONDITIONING CORPORATION

Como Avenue at 33rd, Minneapolis 14, Minn.

NEW PRODUCTS, SUPPLIES, *and* SUPPLY DEALERS

1949-50

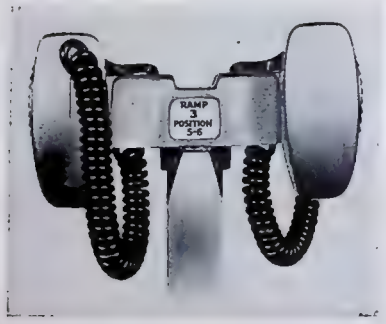
New Introductions During 1949

Brief Thumbnail Descriptions of Selected Products With Interesting Possibilities

BRIEF: *Space permits only cursory presentations of some . . . and only those that seem to have unusual idea value are here outlined . . . The objective in this survey is to give the industry some recorded fact about available products and supplies that may not warrant the fuller analysis of specific surveys of their own.*

FOR DRIVE-IN THEATRES ●

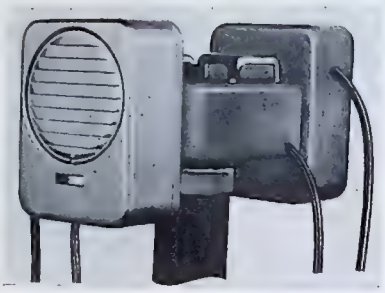
Ballantyne Soundmaster Speakers



The 1950 Soundmaster in-car speaker from the Ballantyne Company reflects several new improvements and a reduced price. A heavier speaker cone and a voice coil with a heavier magnet, extended louvres on the speaker face, and a rubberoid covered speaker hanger to avoid scratching of the car, are the speaker additions. The junction box, in addition to the usual downlight, has a ramp and car position lighted plate so that patrons can locate their parking position after leaving the car for any reason. Wire baskets rather than hanging flanges are also available at a small additional cost.

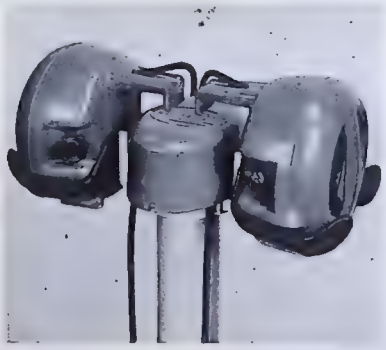
Ballantyne MX-40 Series Speakers

Patterned after the Soundmaster MX-30 speaker the MX-40 combines many of its features at a very low cost. The main difference is in the speaker case which in place of being cast aluminum is a smooth, light-weight, heavy guage steel press job to which has been applied a high gloss baked-on finish. As an alternative this speaker is offered in a fluorescent paint finish at a slight additional cost. The following would enable the speakers to be seen both in the dark of the ramp or in the car interiors without interfering with the screen projection.



The MX-40 is provided with either straight cords or Koil Kords and the junction box is available either with or without downlights.

Motiograph's New Speakers



The new Motiograph speaker housing is constructed of two pieces of moulded plastic with a flexural strength of 10,000 pounds per square inch and a tensile strength of 9,000 pounds per square inch, and is said to be able to withstand unusually rough handling. The housing is said to have withstood humidity and heat tests, equivalent to three years' outdoor exposure, without warping, chipping, or marring the lustrous mahogany colored finish.

The housing which contains the five inch weather-proof speaker unit can be quickly disassembled by removing two special patented screws, permitting quick and easy servicing.

Another feature is the large handle moulded on the front of the speaker, which provides a sure handgrip when handling the unit. The hanger is another integral part of the housing, and it permits secure attachment to the car without marring speaker or car.

As further innovations, the volume control knob is an integral part of the constant impedance volume control shaft. This knob as well as the concession signal switch are inset into the speaker housing. This is to prevent damage to these controls if the speaker is dropped.

RCA's New Speaker

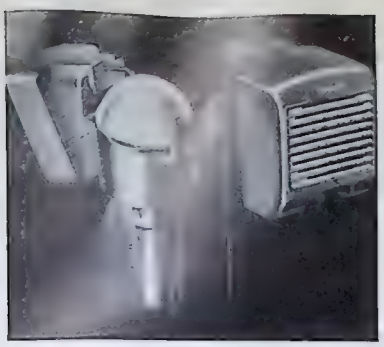
From RCA, comes a new in-car speaker, placed in a new housing designed by John Vassos, nationally known stylist, for extra visual appeal and greater ease of handling. After extensive acoustic tests, a four-inch speaker mechanism was chosen for the RCA equipment. A larger magnet is said to increase the sensitivity of the speaker and to allow for greater-than-standard clearance for the voice coil in the gap. All parts of the mechanism are protected by extra heavy cadmium plating. A wider-than-standard gap is utilized to overcome the expanding and distorting effects of moisture, the impregnated cone or diaphragm is water-proof and fungus-proof, and all cement joints are made with a special thermo-setting cement.



There are small drain holes in the bottom of the RCA speaker, allowing for drainage in the event that wind-driven rain enters the speaker grille or moisture condenses within the case during extreme changes in temperature. The case is made of die-cast aluminum with baked finish.

The junction box has a built-in roadway and post light. The same lamp is directed through two lenses, one of which beams light down the junction box, while the other illuminates the darkened roadway next to the ramp. Optional equipment includes a concessionaire signaling device. Deluxe, heavy rubber covered, rigid steel wire baskets of improved design require no mounting hardware.

Simplex New 1950 Speakers



The new Simplex speaker case is a smooth, lightweight die casting to which a high-gloss baked-on enamel finish has been applied. Peeling and chipping are said to be held to a minimum by a zinc chromate undercoating. The two case sections, tongued and grooved at the seam, are held together with tamper and rust-proof screws. The tapered window hook, which forms an integral part of the back section, is said to permit the speaker to be hung in the window well, even though the window itself is completely closed; it is thus not necessary to hang the speaker on some other part of the car interior during cold or rainy weather.

It is claimed that complete control of speaker response is achieved through the use of a volume control positioned in such a fashion as to make a knob unnecessary. The volume control shaft is completely protected by the unique design of the speaker housing, and the control range runs from full "off" to full "on."

A post light, as well as the well-known Simplex Amber-Glo Dome light, is standard equipment on the new coupling unit.

D.I.T.E. Co. Speaker-Heater Unit



The marked innovation in this new item from Drive-In Theatre Equipment Co., Inc., lies in the fact that both heat and sound are transmitted into the patron's car through a tube. Basically, twin centrifugal blowers, operating at a rate of a 100 cubic feet a minute, blow hot air into mixing chambers of the lower sides of the housing. By means of baffles, sound from the speaker is also mixed at this point; both sound and heated air are introduced at the tube connection.

A number of advantages over former heat and sound devices are claimed by the manufacturer: the patron does not handle any high-voltage electrical equipment; speaker maintenance problems are reduced to a minimum because there is no exposure whatsoever to the weather; the heating units employ heavy duty, rather than miniature type, components; filtered fresh air is introduced into the car, and an inexpensive attachment is available to cool the air considerably on hot summer nights; the speaker loss is negative because quality and power requirements equal those of existing speaker-heater unit combinations, and the total cost is lower than others now on the market.

Theatrecraft Speaker-Heater Unit



Bringing both heat and sound to the patron in his car, this Mobiletone unit manufactured by Theatrecraft Manufacturing Corp. is constructed of heavy-gauge sheet aluminum. The speaker portion contains a 4" GE weatherproof speaker unit, while the heating portion contains a GE calrod unit that is also weatherproof. The noiseless motor requires no oiling and heaters are fused so they can be disconnected in summer without disturbing the speakers. Regular standard features are the parking light, adjustable post flange, tamper-proof volume control, and Koil-Kords.

Theatrecraft Heater



A new individual car heater for drive-ins, another product of Theatrecraft Manufacturing Corporation, Cleveland, O., reportedly can be used in conjunction with any present standard type speaker installation, thus obviating the necessity for making any changes in speaker equipment.

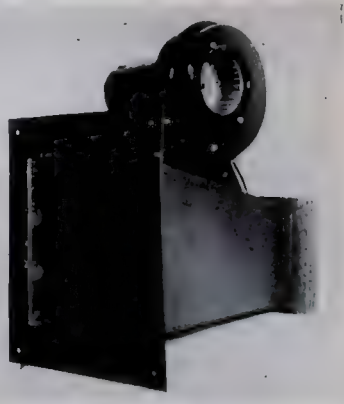
The new heater, marketed under the trade name "Little Inferno," is said to heat a car from 30 to 70 degrees in less than 12 minutes. Heat volume is controlled by the patron with a safety switch on the case. A GE calrod unit constitutes the heating element.

Post Light



A new type of luminaire embodying a fluorescent lamp, manufactured by the Revere Electric Manufacturing Company, is said to be used extensively for lighting up outdoor theatre entrances, exits, and other service points. Since it is claimed that opaque letters can be fired into the glass, the units have proven to be valuable in the direction of traffic. In keeping with the findings of many theatres that air and water dispensing facilities are good adjuncts, the standards are available with hose connections, and the luminaires can be lettered "Water," "Gas," "Entrance," "Exit," "Ladies," "Gents," etc., to direct traffic.

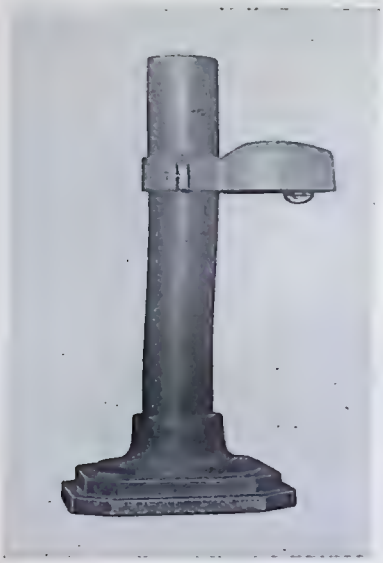
Porthole Blower



A lightweight, easily installed apparatus produced by The Drive-In Theatre Manufacturing Company, Inc., was designed to keep dust, rain, flies, and bugs from coming in projection portholes, and

shadowing the picture on the screen. Another feature is the elimination of optical glass in such openings. It can also serve as an auxiliary exhaust. The motor is a standard make fractional H. P., of quiet design. The opening at the projector has a sliding door that may be closed when the projectors are not being used.

Separate Downlight



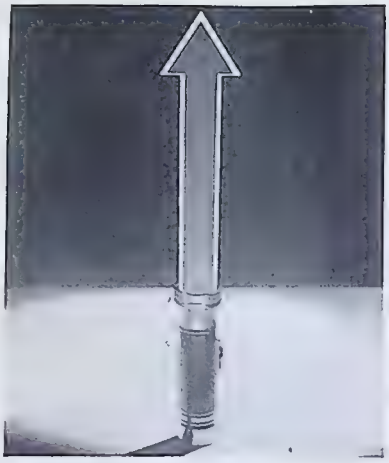
The Ballantyne Company manufactures an MX-13 separate downlight. This patented downlight is made from cast aluminum with a waterproof nylon socket inside and a jewel directing the light downward and throwing a circle four feet in diameter at a normal post height of 44 inches or approximately three feet in diameter from junction box level. These separate downlights are manufactured to fit three sizes of posts, 1½ inch, 2 inch and 2⅜ inch outside diameter. They can also be made on special order to fit any size post at a small cost.

Disposable Ramp Tray

A unique, cardboard Service Saver, manufactured by the Drive-In Theatre Manufacturing Company, is one method for increasing concession sales throughout the nation's many open-airers. Equipped with four deep recesses which will accommodate either hot or cold drinks, the unit also provides space for four hot dogs, loose popcorn, or articles that consume similar space. The Saver can be placed on the car seat between patrons with no fear of tipping.



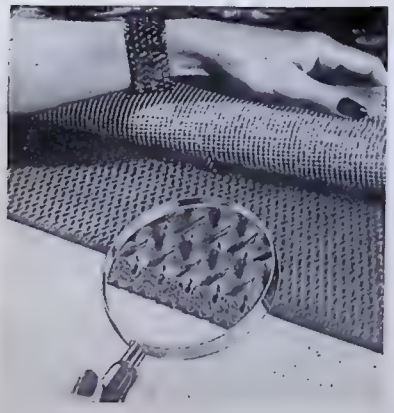
Arrow Flashlight



A unique new flashlight for drive-ins, available from Wil-Kin Theatre Supply, Inc., is fitted with a half-inch thick fluorescent red plastic arrow which is ground and beveled on all edges to give a clearly defined arrow outline when used in darkness. This novel development is said to have proven invaluable already in easing drive-in traffic situations. By means of this clearly visible indicator attendants can readily direct both incoming and outgoing cars, thereby relieving customary congestion.

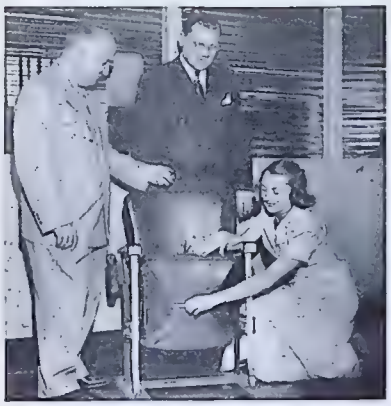
FOR ROOFED THEATRES ●

Sponge Rubber Carpet Cushion



A new type of sponge carpet underlay is said to add luxurious appearance to carpets, increase their apparent depth, and prolong their life far beyond their normal span. Produced from pure, natural crude rubber by the Fremont Rubber Company, the underlay is a quarter of an inch thick, and comes in 20 and 30 yard rolls (36" wide). The underlay, according to the manufacturer, will not spread, pack, or lose its resiliency. It is claimed to be ideal for stair runners, due to its ready absorbency of footstep shocks, which break down the pile of unlined carpets. Other features claimed for the underlay are: its sanitary qualities; its odorless, mothproof, verminproof, allergy-free aspects; its sound suppressing abilities, and its "stay-put" tendencies.

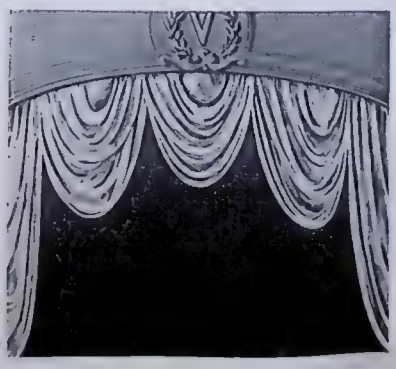
Slip Covers for Seats



A seat cover manufactured by Tufford Seat Covers, Inc., is heralded as offering many advantages. The covers are made in stock types to fit perfectly the four standard type seats, and in four seat sizes within each stock type. Principle advantage of this product is said to be the speed and ease of fitting seats with the covers. To install, it is unnecessary to remove the seats from the frames, as in previous re-upholstering methods. This step also is said to eliminate the loss of revenue while seats are being recovered. The cover fits on smoothly over top and bottom, and zips closed. The seat covers are smooth, and are claimed to be durable, flame resistant, and long wearing.

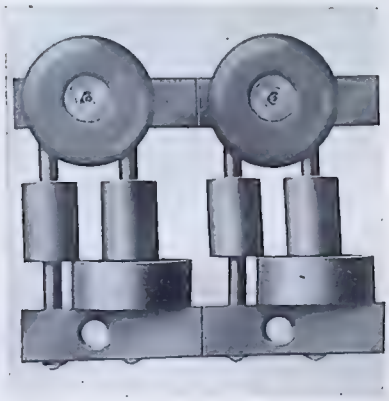
Vallen's Multiple Drape Control

The Vallen, Inc., simplified mechanical assembly does away with the normal ex-



pensive counter-balance system and the space required for contour lifts. Installed with only 22 inches of headroom, the new curtain control is said to be inexpensive to purchase, simple, and foolproof in operation, and totally lacking in troublesome gadgets. Furthermore, it is claimed that the unit requires no maintenance whatsoever. Due to the simplicity possible in adjustment of festoons, various curtain effects can be readily obtained. An exclusive one-button "Start-Stop-Reverse" is said to afford complete control of operation at all times. The electrically operated control is available in all sizes.

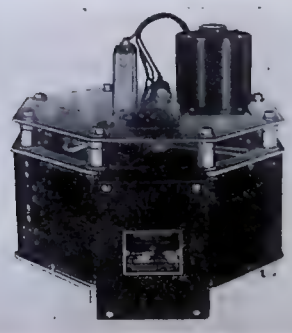
Curved Track Curtain Control



Vallen, Inc., has also developed what is said to be the first practical, trouble-free equipment for automatic curtain operation on curved tracks. This equipment is said to handle curtains of any size on curved or reverse curved tracks of any radius or radii without pushing by pole. The problem of a curtain carrier jamming or fouling as it follows a curve is said to have been eliminated. This equipment is said to have made possible the first practical use of automatic or manual control curtain in many situations where a curved track was the only answer, but which would have otherwise been impractical or even impossible.

Powerstat Dimmer

Theatre owners can control stage and/or house lights from remote stations, using pushbuttons to operate this new non-interlocking 4600-watt motor driven Powerstat dimmer unit introduced by Superior Electric Company. Operating from 50/60 cycle, 115 volts single phase input, this dimmer is capable of taking care of the average motion picture theatre with efficiency. Through it the manager, floor supervisor or projectionist can dim lighting to a complete blackout or bring it up to full brilliancy from any desired point in the theatre.



Wrought-Iron Wallpaper



A new wall-paper which gives the effect of hand-wrought-iron has been designed by the A. H. Jacobs Wallpaper Company, New York. The paper is especially adaptable for theatre use as it can be used effectively around pillars, beams, posts, door entrances, stage settings, props, arches, elevators, railings, windows, etc. It is obtainable in two colors, black wrought-iron on light grey or white wrought-iron on gunmetal grey. This unique decorative wallpaper is an exclusive design. The makers claim that you can work out many more patterns than those illustrated in their brochure.

Wall Washing Machine

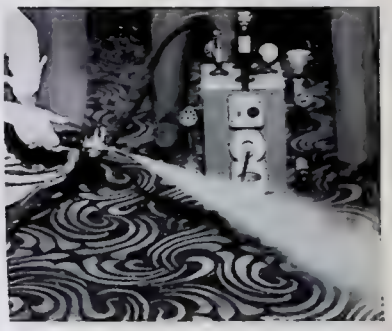
A new wall washing machine, said to be ideal for washing painted walls, ceilings, washable wallpaper, marble, tile, and all other washable surfaces, has been put on the market by the Continental Car-Na-Var Corporation. The sturdy unit is said to be easy to operate because there are no electrical connections or moving parts. After one tank of the dual-tank machine has been filled with cleaning solution and the other with clear water, air pressure is brought up with a few light strokes of the hand pump. Wall washing cloths are then clamped on the appliers, and the cleaning operation is ready to get under way.

By pulling lightly on the trigger control valve in the handle of the applier



attached to the cleaning solution tank, the solution rises and saturates the cloth. The applier should then be placed to the wall and the surface covered with a stroking motion. The thin dirt-dissolving film which is placed on the wall is next removed with the clear water applier. A third applier, a buffer independent of the machine, is said to eliminate all streaks.

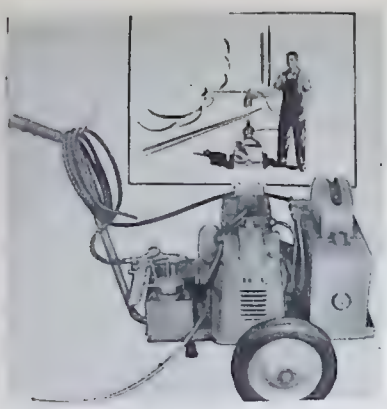
Chewing Gum Remover



Theatremen who have been looking for another method to remove chewing gum and candy from carpeting should be interested in the new process offered by Rachlin and Company, national distributor. Using 50 pounds of pressure at 250 degrees heat, 110 or 220 volts AC or DC, the device has received endorsement from theatremen who have watched test demonstrations. The gum and goo just rolls right out of the carpet nap.

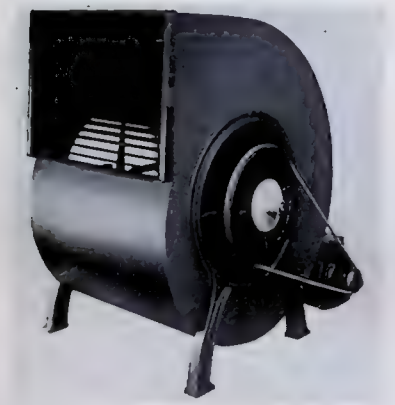
Insect Control in Large Areas

West Disinfecting Company recently announced a new method of effective insect control in areas of large theatres by utilizing its Super Mistorizer, a unit consisting of three component parts, a one-half H.P. compressor, a three-gallon insecticide tank, and a pressure feed type of hand spray gun. Need for local auxiliary air, steam, or other driving power is said to have been eliminated by providing the dispenser with its own compressor unit. The Mistorizer's two nozzle head is specially designed to convert West's insecticide, Vaposector Fluid, into



a "dry" mist of insect-killing droplets. When used according to directions, tiny particles of insecticide are produced by the Super Mistorizer, which will not wet or condense on surfaces, seating or equipment. The unit also features a one-hour timer, and when placed in the middle of the auditorium it will fog, and turn itself off automatically. One filling of the tank is said to be sufficient to completely fog 250,000 cubic feet of space or 10,000 cubic feet in five minutes.

Rust-Proof Theatre Blower



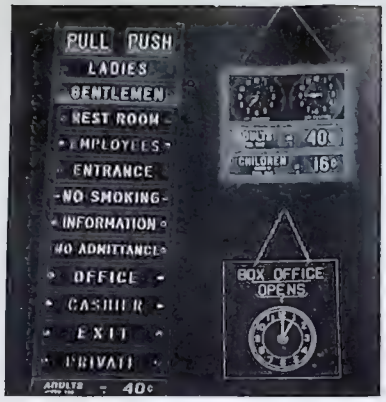
The Reynolds Manufacturing Company recently placed on the market a theatre blower, said to be completely rust-proof, which should prove invaluable to theatres situated in sections where salt air and a humid climate combine to rust equipment. Although standard model Reynolds blowers are equipped with steel blades, this new deluxe model has aluminum ones. A complete line of blowers, all of which are carefully designed to bring in and distribute fresh, cool air throughout theatres, is available in capacities ranging from 2,500 to 30,000 cubic feet per minute.

Super-White Plastic Screens

The new Vocalite all-plastic Super-White screen is said to produce a wider vision angle and to reduce distortion. Flameproof, wrinkleproof, and fungus-proof, it is also washable.

FOR GENERAL THEATRE USE

Non-Illuminated Signs



A large variety of date, directional, and admission signs is now available from Associated Ticket and Register Company. The broadness of the line enables the theatre owner to purchase all of his sign needs at once, thereby avoiding payment of higher prices for special orders. The complete stock of date panels will fit standard insert frames. The box-office group includes various non-illuminated Lucite signs with removable panels. These may be obtained as a packaged item with chrome frame and plastacele inserts included. Extra inserts are always obtainable for any contingencies which might arise. Hand and electric-operated clocks, indicating feature times, may be mounted in the sign frames as well. Bakelite clock signs for the box-office are also offered.

Neolectric Signs



An innovation in signs ideally suited for display or directional purposes in theatres is a recent product of the Neolectric Corporation. This sign features letters two and one-half inches high, said to be brilliantly illuminated in bright neon when placed on the sign bed. The vivid light is produced without plugs, wires, or connections of any sort between the letters and sign. This permits the letters to be removed at any time, it is claimed, and rearranged without shutting off the current. Available in two models, 35 inches by 10½ inches or 25 inches by 10½ inches, they contain space for a three-line message. Every type of symbol, letter and numeral is available, which provides a versatility in application. Letters are guaranteed for 2,500 burning hours.

An All-Purpose Sign

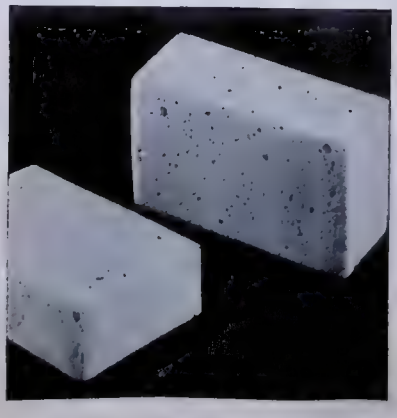


Electronic Devices, Inc., claims that its chief feature is the use of the clip-on lucite letters, which come in four sizes ranging from one and one-half inches to five and one-half inches. It is also stated that the "miniature marquee" quality permits sign changes at will and in a matter of seconds. The sign front is made of clear Corning glass tubing with channels 10 mm. apart, while lucite letters fit in these channels. Letters and numbers are silhouetted, and come in red, blue, and green translucent lucite. It is claimed that the signs are extremely practical, and can either be made permanent installations along the wall or merely supported by hanging chains; chains and accompanying hooks are furnished with the sign.

The signs are available in either single or double exposures, thus allowing a message to be seen from the front or from the rear as a hanging all-purpose sign

Plastic Sponges

A new series of plastic sponges, manufactured by the Barco Chemical Products Company, lays claim to a number



of distinct advantages, among which are to be found: resistance to mild acids, alkalies, soaps, washing compounds; ready applicability to boiling or sterilization; extreme softness and pliability, and ability to wipe dry like a chamois. The new sponges are white and said to remain strong and durable under the roughest usage. They should, therefore, be of great service in the cleaning of theatre lounge rooms.

Non-Woven Cleaning Cloths



A new non-woven cloth, which is said to pick up dirt, grease, and liquids with remarkable ease and yet rinse completely clean for continued use, has recently been placed on the market by Miracloth Corporation. The lint-free cloth, claimed to have many uses either wet or dry, is a valuable asset to the theatre in the wiping of display cases, cleaning windows, polishing of washroom fixtures, dusting lobby and office furniture, shining up candy counter tops, etc. According to the manufacturer, the cloth is made up of tiny rayon fibers which are completely coated with cellulose. The coated fibers are bonded together with a cellulose binder which leaves countless numbers of microscopic holes between them. Thus dirt goes into the holes instead of into the fibers themselves. When the cloth is rinsed, the dirt washes out of the holes in the fabric to leave it absolutely clean and odorless. After the cloth has been used repeatedly, a soapy rinse will suffice to restore it to its original clean state.

The Electronic Towel

A new hand-drying machine for theatre washrooms, claimed to dry hands in approximately 30 seconds, was recently placed on the market by the Electronic Towel Sales Company, Inc. By use of an "electric-eye" as an activating agent, the unit is said to eliminate entirely the use of springs, pedals, buttons, levers, or any physical contact with the machine itself on the part of the user. According to the company, users merely place their hands in the ample aperture directly beneath the machine, which is mounted shoulder-high on the wall, thereby breaking the beam of the "electric-eye" to start the machine. Infra-red lamps provide quick-drying heat for the hands, while a Westinghouse Sterilamp sanitizes them by ultra-violet rays. At the same time, the machine is said to ozonate the surrounding area to aid in the elimination of washroom odors. The unit, said to employ no moving parts other than a blower fan and its motor, may be easily plugged into any wall socket. Its hammertone-finish housing is of 18-gauge all-steel construction, and is claimed to be specially treated to resist cigarette burns and other types of defacement such as rust and dents.



Protective Spray Waxes



Two spray waxes, manufactured by Bostwick Laboratories, should find many practical theatre applications. The first, although commonly used as an automobile wax, is also said to give machinery ample protection against ruinous dust, rust, corrosion, and weather. Specifically designed to give furniture, woodwork, linoleum, leather, and porcelain a durable protective finish in a matter of minutes, the second of these two waxes is reputed to be particularly suitable for spray-waxing wood veneer paneled walls. The manufacturer guarantees both waxes against evaporation.

The New Altec Microphone

The Altec Miniature Microphone, unprecedentedly small in size, and weighing less than one-quarter ounce, is mounted on a long tapering base shaped like a conductor's baton, and is adaptable to all types of stand mountings or overhead suspensions. It is so inconspicuous that the artist or speaker can direct his entire attention to the audience. The tiny "mike" is completely non-directional, or, as its makers term it, "omni-directional." It is no longer necessary for performers to limit their speech to the "live" side of the mike.



The only moving element in the instrument is an extremely small diaphragm actually no larger than the human eardrum, yet the sound output from this tiny apparatus is somewhat greater than from conventional large microphones.

Cigarette Butt Receptacle

Designed for use in men's rooms of public buildings, hotels, restaurants, theatres, and drinking establishments, a new receptacle is said to eliminate plumbing difficulties caused by cigar and cigarette butts, matches, and chewing gum dropped into urinals. A sand-filled tray, located on the wall just above the urinal, replaces the sign usually found there. A wedge-type tail plate on the back of the tray fits into a slotted wall bracket to make it easily removable for cleaning. Construction is of 16-gauge steel.



Hand Dryers Are Now Accepted

Their Many Advantages Over Paper Towels Have Won The Appreciation of Patrons and Management Alike

The washroom is without doubt the one place in the entire house where it is most important that the theatre "put its best foot forward." Patron satisfaction can stem only from the tangible evidences of a good public relations program, and much goodwill can be created or destroyed in the washroom. It is here that the patron will be quickest to note disorder, odor, and poor sanitation, for there is a personal touch connected with the washroom that is found in no other part of the theatre.

One of the biggest obstructions in the maintenance of washroom tidiness has been the paper towel for drying hands. Used up at a rapid and uneconomical rate of speed, they are crumpled in sloppy fashion and aimlessly discarded; frequently they do not even land in the waste receptacle. Aside from the unkempt spectacle the litter of paper towels presents, they are also serious fire hazards. Statistics show that more theatre fires and smoke "scares" have been started by a patron carelessly tossing a cigarette butt in a heap of inflammable paper towels than have been caused by film blazes in the projection booth.

The Electric Hand Dryer

A means of solving the obvious need for tidying up the public washroom and making it an object of attraction to, rather than attack by, the public was first envisioned and studied by a young mechanical engineer from Alaska 29 years ago. He found his answer to the problem of washroom sanitation in the evaporative process of drying hands through the use of an electrically operated dryer.

After the development of the first practical model nearly three decades ago, the young engineer decided to devote his life's work to the electric hand dryer industry. His 18 years of experience with two leading companies engaged in the business involved extensive research work and user contact testing. The knowledge acquired during these years was coordinated in the development of the Electric-Aire Evapo Hand Dryer, a unit which incorporates every feature needed to assure tidy washrooms.

The Electric-Aire Hand Dryer is available in two types for wall mounting: semi-recessed and wall surface mounting. The dryers, which have interchangeable mechanisms, may be neatly mounted on walls because all anchor bolts are concealed within the housing cabinets or housings to afford a perfectly smooth outside surface and excellent protection against vandalism. The cover, however, may be easily removed by the service department for cleaning, oiling, or repairs. The entire cabinet has a white baked enamel finish trimmed in black and is unusually durable.

BRIEF: ***Anyone who has ever visited a theatre washroom has been subjected to one particularly unpleasant sight . . . a clutter of dirty paper towels stuffed in a wastebasket . . . and often tumbling over onto the floor . . . This rubbish gives the entire room a disorderly look . . . and creates a dangerous fire hazard as well.***

The electric hand dryer has been found to be one of the best means yet devised to avoid washroom untidiness . . . and to thwart careless cigarette butt tossers . . . Installation is simple and operating costs are low . . . especially when one considers both the costs of towels themselves and their handling . . . Patrons have come to like the idea of drying their hands by hot air because no chapping results . . . and the whole process only takes a few seconds.

Like any other new invention, electric hand dryers were looked upon skeptically at first . . . but now, due to their many advantages, they have firmly entrenched themselves in hundreds of public places . . . including theatres . . . The day of the paper towel is near eclipse by these magical electric dryers . . . and before long the biggest destroyer of washroom tidiness and fire safety may well become completely extinct.

The insulated mechanism, cradled in the cabinet with a rubber-floated three-point suspension to eliminate all vibration, is activated by a push button, automatic control that does away with the need for an additional installation of a foot control. The unit will generally dry hands in 20 to 30 seconds, depending upon humidity conditions and room temperature, but will operate for a full 37 seconds before automatically shutting off. Its entire operation is swift, efficient, and inexpensive.

Public Acceptance Won

When they were first introduced and during their early years on the market, electric hand dryers were regarded somewhat skeptically in the same way that other novelties such as the automobile and the airplane were. In the first place, there was some doubt that an electric unit would dry hands as effectively as a paper towel, and, secondly, a strong association had been formed in the minds of people between wet hands and the physical act of wiping them on a towel.

With the passage of time, however, and the growing realization that the electric hand dryer offered the only practical means of combatting the nuisances afforded by paper towels, its popularity grew steadily. Schools were among the first prominent users, and the enthusiastic reception which electric hand dryers found there soon prompted hundreds of colleges and universities, railway stations, office buildings, and other public places to adopt them for their washrooms. As schools were the pioneers, whole generations are now becoming adult with a familiarity with hand dryers and a ready acceptance of them as washroom accessories.

It was only natural, then, that electric hand dryers should come to be considered for theatre use. The reasons are simple: attractive washrooms; continuous, uninterrupted service without attention of janitor or maid; removal of a dangerous fire hazard; elimination of the chief cause of clogged plumbing; completely sanitary service beneficial to health of patrons; thorough drying without chapping or roughening of hands; elimination of all buying, storage, distribution, collection, and disposition of towels, the cost of which today is often equal to the initial cost of the towels. In connection with this last point, the cost of operating the Electric-Aire Dryer, for example, does not exceed 10 per cent of the initial cost of the towels. Furthermore, a recently completed survey over a three-year period of all Electric-Aire Dryers in use shows that parts replacement costs averaged only 30 cents per dryer per year—approximately the cost of a single pack of a good grade of towels which provides only 60 drys.

Conclusive evidence that the electric hand dryer has come to be recognized as a valuable asset to the theatre and accepted as a great convenience by the patron is found in the number of the theatre installations made by the Electric-Aire Company in the last few years. The following are a few of the many representative theatre users: Standard Theatres Company, Milwaukee; Kerasotes Theatres, Springfield, Ill.; Valos Theatres, Chicago; Fox Intermountain Amusement Corporation, Denver; Beverly Theatre, Bridgeport, Conn.; Lamont Theatre Service, Albany, N. Y.; North Avenue Outdoor Theatres, Chicago; Detroit Theatres, Detroit; and Palo Alta Theatre, Palo Alta, Calif.

CONCLUSION

It is reasonable to conjecture that as time goes on more and more theatres will come to appreciate the many advantages of electric hand dryers. As it is now, this practical washroom utility has made the paper towel as outmoded as the automobile did the horse and buggy.

The electric hand dryer is, in short, a better aid to washroom cleanliness than any broom or wastebasket on the market today, to say nothing of the number of unnecessary theatre fires it will prevent. The patron has come to accept it as a natural preferred convenience. An electric hand dryer will enable "good riddance of bad rubbish" for all concerned.

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Comprehensive Listing of Names, Addresses, Personnel, Products, and the Areas Served

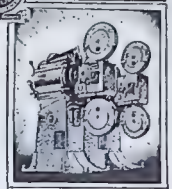
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*GIRARD THEATRE SUPPLY CO., 532 W. Van Buren St., Phoenix.

ARIZONA FILM SUPPLY CO., 33 W. Congress St., P. O. Box 5447, Tucson. Telephone: 3082. PERSONNEL—Geo. K. Diamos, Geo. N. Diamos, Spirro Diamos, Nick Diamos. AREA SERVED—Arizona.

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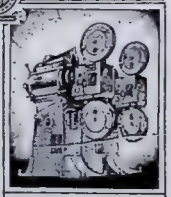
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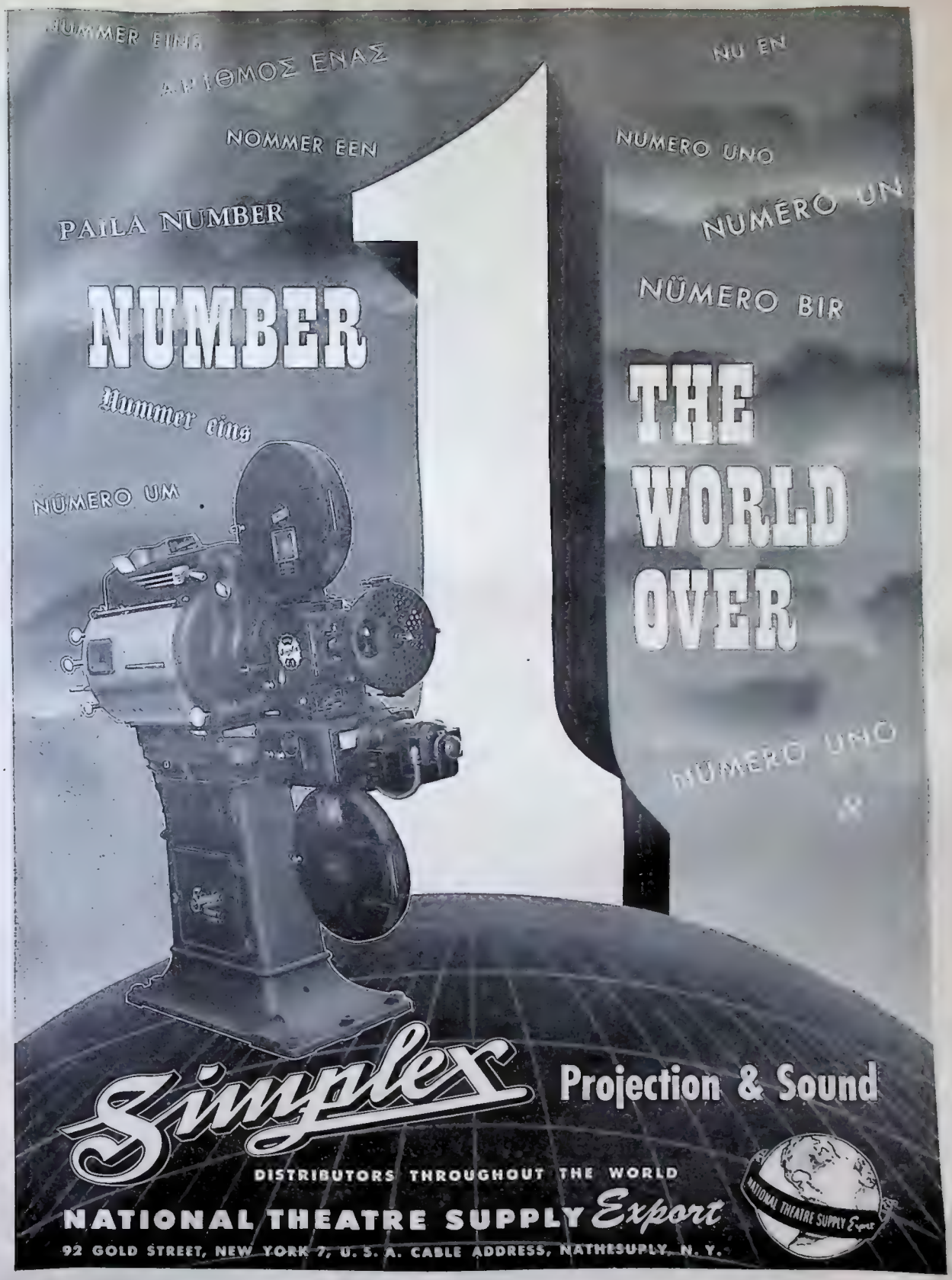
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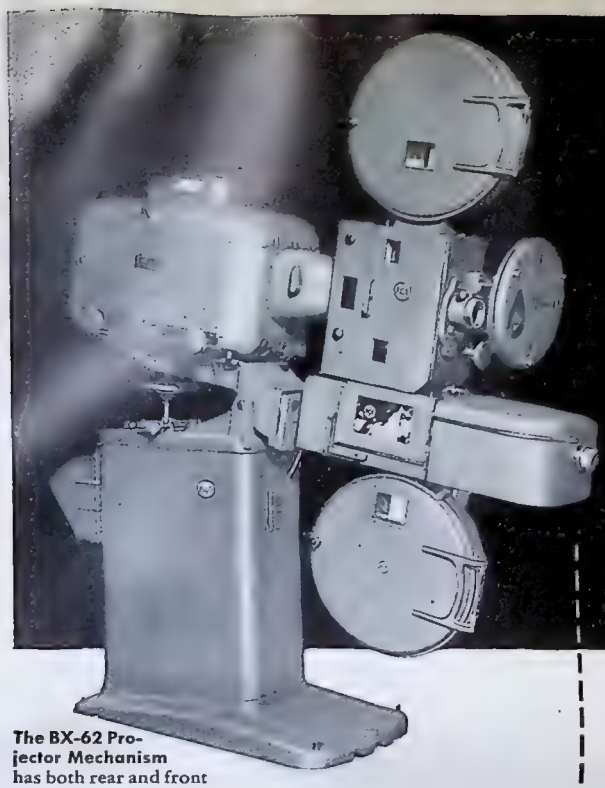
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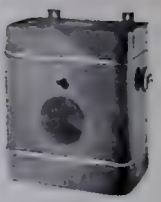
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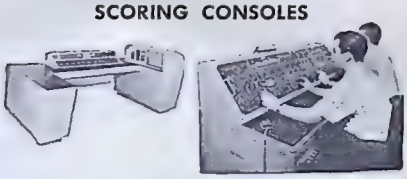
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THE SWEDISH WESTERN ELECTRIC CO., AKTIEBOLAG, Sveavagen 25-27, Stockholm. PERSONNEL—*Managing Director:* Stephen Wiedemann. Products Sold: Westrex Corp. line. COUNTRIES SERVED—Sweden, Norway and Finland.

SWITZERLAND

*VICTOR FILMS LTD., Schutzenmattstrasse 43, Basle. Products Sold: Gaumont-Kalee.

WESTREX CO., ALPINE (formerly Alpine Western Electric Co.), Viadukstrasse 60, Basle. Products Sold :Westrex Corp. line.

JACQUES BAERLOCHER CORP. FOR ELECTRONIC PRODUCTS, Haus am Kreuzplatz, Forchstrasse 2, Zurich. Products Sold: RCA Theatre and Sound Equipment.

M. F. BAUMANN & CO., Forchstrasse 103, Zurich. PERSONNEL—*Manager:* Mr. Keller. Products Sold: National Theatre Supply Line.

TASMANIA

WESTERN ELECTRIC CO. (AUSTRALIA), PTY., LTD., 38 Elizabeth St., Hobart. Products Sold: Westrex Corp. line

THAILAND (SIAM)

BARROW, BROWN & CO. (1948) LTD., Barrow, Brown Bldg., Bangkok. Products Sold: RCA Theatre and Sound Equipment.

SEMCO CO., LTD., 1244-46 New Road, Bangkok. Products Sold: Westrex Corp. line.

SHAW BROS., LTD., Capitol Cinema Bldg., New Road, Bangkok. Products Sold: National Theatre Supply Line.

TUNISIA

LEO VOGELWEITH, Rue Garibaldi, Bizerte. PERSONNEL—*Manager:* Mr. Monnier. Products Sold: National Theatre Supply Line.

* Listing not confirmed by Supply Dealer

TURKEY

TEKNIKA, T.A.S., P. O. Box 1153, Istanbul. Products Sold: RCA Theatre and Sound Equipment. COUNTRY SERVED—Turkey.

TURK MOTOR ANONIM SIRKETI, Beyoglu Istiklal Cadesi, Istanbul. PERSONNEL—N. Verdi. Products Sold: National Theatre Supply Line.

UNION OF SOUTH AFRICA

AFRICAN CONSOLIDATED FILMS, LTD., Broadcast House, 170 Commissioner St., Box 1574, Johannesburg. PERSONNEL— T. Watson. Products Sold: National Theatre Supply Line, RCA Theatre and Sound Equipment, Gaumont-Kalee.

WESTERN ELECTRIC CO. (NEAR EAST), 96 Main St., Johannesburg. Products Sold: Westrex Corp. line. COUNTRIES SERVED—Union of South Africa, Northern and Southern Rhodesia, Belgian Congo, Portuguese East and West Africa, Tanganyika, Uganda, Kenya Colony, Zanzibar, Angola.

URUGUAY

*HAROLDO GARCIA AROCENA, San Jose 1202 Esq. Cuareim, Montevideo. Products Sold: Gaumont-Kalee.

CINEMATOGRAFICA GLUCKSMANN, S.A., Rio Branco 1320-26, Montevideo. PERSONNEL—*Owner and Manager:* Bernardo Glucksmann. Products Sold: National Theatre Supply Line. COUNTRY SERVED—Uruguay.

VENEZUELA

*LUIS MARTINEZ C.A., Miracielos A. Hospital 87, Caracas. Products Sold: Gaumont-Kalee.

NATIONAL SUPPLY, S.A., Gorda a Asserradero 32/34, Caracas. PERSONNEL—*Manager:* Augusto M. Matilla. Products Sold: National Theatre Supply Line.

STANDARD ELECTRIC, S.A., Bloque 6, Local 6, El Silencio, Caracas. Products Sold: RCA Theatre and Sound Equipment. COUNTRY SERVED—Venezuela.

WESTERN ELECTRIC CO (CARIBBEAN), Cipresas a Miracielos No. 1-1, Caracas. Products Sold: Westrex Corp. line.

WEST INDIES

Aruba

DE VEER THEATRE CIRCUIT, P. O. Box 3, Aruba. Products Sold: National Theatre Supply Line.

Cuba

NATIONAL SUPPLY, S.A., Consulado 219, Habana. Telephones: A-7363 — (Emergency Night) F-3798. PERSONNEL—P. Saenz. Products Sold: National Theatre Supply Line. COUNTRY SERVED—Cuba.

*SELECT CINEMA SUPPLY, 113 Trocadero St., Habana. PERSONNEL—Sanchez, Victoria. Products Sold: DeVry, Ballantyne, and Miscellaneous.

STANDARD ELECTRIC, S.A. OF CUBA, Trocadero 163, Habana. Products Sold: RCA Theatre and Sound Equipment.

*VINCENT VAZQUEZ, Calle Consulado No. 298, Habana. Products Sold: Motiograph.

WESTERN ELECTRIC CO. (CARIBBEAN), Industria 307, Habana. Products Sold: Westrex Corp. line.

Curacao

EL LOUVRE, S.A., P. O. Box 138, Curacao. Products Sold: RCA Theatre and Sound Equipment.

MARCHENA-MORON & CO., P. O. Box 13, Curacao, N. W. 1. Products Sold: National Theatre Supply Line. AREA SERVED—Curacao.

Haiti

SOCIETE HAITIENNE d'AUTOMOBILES, Mallenbranche, Gentil Bogat & Co., Port-au-Prince. Products Sold: RCA Theatre and Sound Equipment.

Jamaica

PALACE AMUSEMENT CO. (1921) LTD., P.O. Box 211, Kingston. Products Sold: Gaumont-Kalee, RCA Theatre and Sound Equipment.

Martinique

RENE DIDIER, Fort de France. Products Sold: National Theatre Supply Line.

Puerto Rico

EDUARDO G. GONZALEZ, P. O. Box 3871, San Juan. PERSONNEL—*Owner and Manager:* Eduardo G. Gonzalez. Products Sold: National Theatre Supply Line. AREA SERVED—Puerto Rico.

SPLENDID, INC., P. O. Box 4568, San Juan. Products Sold: RCA Theatre and Sound Equipment.

WESTERN ELECTRIC CO. (CARIBBEAN), P. O. Box 3242, Santurce 29. Telephone: 2-0669. PERSONNEL—*Branch Manager:* W. H. Meisel. Products Sold: Westrex Corp. line. AREA SERVED—Puerto Rico, Dominican Republic, Virgin Islands.

Trinidad

GENERAL SUPPLIES, LTD., 19 and 28 Henry Street, Port of Spain. PERSONNEL—*Manager:* Isaac N. Akow. Products Sold: RCA Theatre and Sound Equipment. COUNTRIES SERVED—Trinidad, all of British West Indies, including British Guiana.

GLOBE THEATRES, LTD., Port of Spain. Products Sold: National Theatre Supply Line.

MASONS LTD., 2 and 4 St. Vincent St., Port of Spain. Products Sold: Gaumont-Kalee. COUNTRIES SERVED—West Indies, British Guiana, excluding Jamaica.

NATIONAL UNION RADIO SERVICE, 9 Cornilio St., Port of Spain. PERSONNEL—*Owner and Manager:* J. H. Fung. Products Sold: National Theatre Supply Line. COUNTRIES SERVED—Trinidad, British Guiana, Venezuela.

WESTERN ELECTRIC CO. (CARIBBEAN), 9-11 Edward St., P. O. Box 161, Port of Spain. PERSONNEL—*Branch Manager:* O. J. Forest. Products Sold: Westrex Corp. line. COUNTRIES SERVED—Trinidad; Barbados; British, Dutch and French Guianas; Leeward and Windward Islands.

* Listing not confirmed by Supply Dealer

Hearing Aids Developments

The Deaf Patron's Lost Dollar Is Recovered by Unique System

BRIEF: *Many a day's take . . . as numerous theatres have found to their dismay . . . would have been higher if they had been able to provide hearing aids for the deaf . . . who represent a sizeable body of potential moviegoers . . . These people are truly the industry's "lost" patrons.*

Various hearing aids have been developed for theatre use in recent years . . . in an effort to win back the hard-of-hearing revenue . . . In order to acquaint the theatreman more fully with the prime feature of these valuable boxoffice boosters, the following article reviews the important types . . . with special stress laid on the Telesonic Loop System . . . a type requiring no plug-in attachment.

Statistics show conclusively that nearly one out of every ten Americans is hard of hearing. Many of these handicapped persons have stayed away from the theatre since the dawn of the sound film era because their deafness prevents them from hearing the show properly, and thereby spoils their full enjoyment of it. The loss in boxoffice receipts through the absence of these 15,000,000 or so potential patrons runs into astronomical figures. Furthermore, this serious situation is aggravated by the fact that these hard-of-hearing persons in all probability keep another 5,000,000 patrons away from the theatre because a family group instinctively seeks amusement that every member can share.

Portable Hearing Aids

The natural solution to this problem lies in the installation of hearing aids through which deaf persons can hear the show clearly. When the theatre industry first became aware of the huge losses incurred by the absence of deaf persons, portable hearing aids were tried. They were, however, found of doubtful merit because disquieting noises made by the surrounding audience, plus the frequently faulty acoustics of the theatre in those early days, combined to subordinate the sound of the program to nearby audible distractions.

The Special Seat Type

In an effort to overcome the drawbacks of portable hearing aids, jack-boxes were installed in special seats wired for hard-of-hearing patrons. When a deaf moviegoer attends a theatre equipped with this system, he requests an aid at the boxoffice when he purchases his ticket. A receiving assembly is then turned over to him, and an usher generally leads him to one of the special seats and plugs in the unit.

This type of hearing aid, although a vast improvement over the clumsy portable unit, has some disadvantages. In the first place, it requires special attention and, secondly, the use of special seats requires that deaf patrons sit in certain sections of the theatre that may not be agreeable to them from a visual point of view.

The Telesonic Loop System

This system, previously discussed in detail on pages 349 to 351 of the Sixth (1947-48) Annual Edition of THEATRE CATALOG, has as its most notable advantage the fact that it requires no direct connection between the sound of the picture and the receiver which the deaf patron uses. It thus enables patrons to sit anywhere in the theatre, as opposed to the special seat type of hearing aid which has wire connections directly to the sound system.

The secret of this new system lies in a single Telesonic loop running throughout the theatre and coupled to the speaker line. Programs are transmitted by audio-frequency induction through the loop and picked up by the individual receiver given to each patron. The listening unit is small (about the size of a cigar box), durable, and leather-covered. It contains an induction or search coil, a thermionic receiver, and a light-weight imported earpiece with volume control.

The entire unit with modern hearing aid batteries weighs less than 30 ounces, is no more conspicuous than a small book, and requires no plug-in or attachment to any fixed point. A Telesonic installation is quite simple and can be made by a house electrician, an electrical contractor, or sound service organization in a few hours at moderate expense.

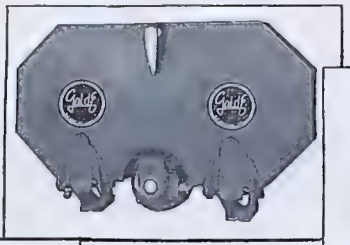
It is interesting to note that the Telesonic Theatrephone Corporation recently adopted a program of licensing manufacturers of portable hearing aids to install or attach Telesonic pick-up coils in their hearing aids to enable the users of such aids to hear with them in any theatre equipped with the Telesonic Loop System.

The system is also finding a number of valuable uses in television broadcasting in the coaching and prompting of artists. Finally, and this is a particularly intriguing point, experiments are being made with an end toward adapting the Telesonic system to drive-in theatres, so that there will no longer be a need for fixed posts and special wiring to speakers.

Get all 4 advantages with GoldE theatre equipment

1. Smart appearance
2. Convenience
3. Greater operating efficency
4. More economy

In lobby, booth and box office.



Model D-H Automatic, Enclosed Rewind

Sturdy, long-lasting trouble free. Super silent. Super safe. Super strong. U-L approved, eliminates fire hazard. Micro switch safety cut-off. WHEN DOOR OPENS MOTOR STOPS. Positive friction. Will not clinch film. Reels cannot fly off with tilt-back case. Modern, compact design—the favorite of operators everywhere.



MOD-URN SAND URN

Modern, handsome sand urn. Attractive new design makes for easy maintenance, dresses up your lobby. A necessity for every lobby at convenient locations. Two attractive models, one with Mandarin Red trim, the other with Ebony Black. Chrome center column beautifully engraved. Unique integral design eliminates loss or theft of handles or ornaments. Free Bulletin No. 501.



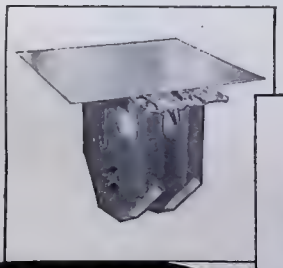
TICKET BOX

Beautifies any theatre lobby. Sturdy, welded steel construction. Cast aluminum top and bottom. Finished in black baked enamel. Genuine etched glass illuminated panel. Steel ticket hopper. Choice of Mandarin Red, Royal Blue, or Burnt Orange. (Special colors also available). Free Bulletin No. 455.



500 WATT ROTOCHROME SPOTLIGHT

Peps up lobby and displays with continuous flood of color in motion. Compact, safe, simple and sturdy with attention compelling light and color. FEATURES: completely automatic, six continuous color changes, adjustable beam size, positive locking tilt, handsome Sierra Brown wrinkle finish. Free Bulletin No. 471.



TICKET DISPENSER

Most economical unit for application where a low cost is important. Tickets easily grasped. Magazine loaded ticket units—sturdy, attractively finished. Additional ticket magazines may be added. Rub proof. Highly polished. Satin chrome top plate. Free Bulletin No. 476.



ALL PURPOSE PROJECTOR

This 1000 watt double-blower cooled projector projects from your booth everything from 3¼x4 down to 2x2 (35mm) SLIDES PLUS FILM STRIP.

Outstanding features for long-life, easy use and coolest operation—high powered illumination, rugged construction. Free Bulletin No. 473 gives full details.

GoldE MANUFACTURING CO.
1220T West Madison St.
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Designers and manufacturers of theatre equipment for 25 years
Brightest Name in Light Projection

Other GoldE quality products for theatrical and photographic use.
Carbon waste cans • Spotlights • Take ups • Music stands. Snap-It Binders for 2x2 slides • Reflex Binders for 2¼x2¼ Transparencies. *Available through leading theatre supply dealers.*

For Those Who Want The Best!

GOLDBERG BROTHERS THEATRE EQUIPMENT



GOLDBERG "NO-DRAFT" SPEAKING TUBE

Prevents drafts . . . Dependable . . . Good Looking. Consists of two rust-resisting plates, chrome plated. Easily installed with washers and a screw. Carried in two sizes: 2¼" to 4¼" opening, 2¼" to 5½" opening.



Projection Booth

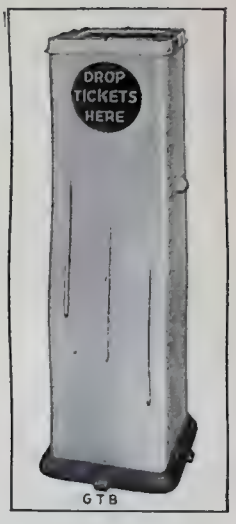
TABLES AND CABINETS

Constructed of heavy angle iron, with reinforced steel top, set-in drawer, 3" block extension. Made in sizes 45" and 60" long. Cabinets made of heavy zinc bond steel, with inner reinforcement between the 1" hollow walls separating each section. Holds 15" reel of film . . . Door closes automatically . . . Made in units of 2 to 12 sections.

GOLDBERG TICKET BOXES

Neat and Distinctive

- ALUMINUM
- LIGHT BLUE
- RED



Attractive looking, made of heavy high grade steel, baked enamel crackle finish and aluminum polished top. Made in two styles: G.T.B. has glass baffles and cast iron base. P.T.B. has no glass baffles nor cast iron base. Top has slot for depositing tickets.



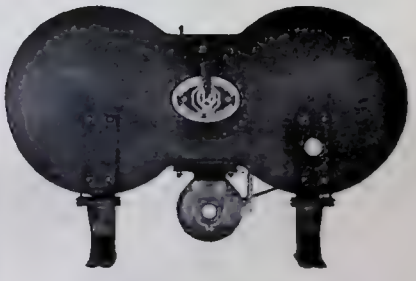
CAST ALUMINUM REELS

The reels in the biggest demand today by projectionists . . . beautiful in appearance, carefully machined, light, strong and substantially made. Lock holds the reel solid. 4 slots provide very easy threading. 15" dia. 5" hub, 14" dia. 4" hub. Packed in individual cartons, approximately 2½ pounds each.



SAND URNS

Sturdily built; beautifully designed; chromium trimmings; chromium plated top. 10" top diameter, 20" high, 12" bottom diameter. Red, Yellow, Blue and Green.



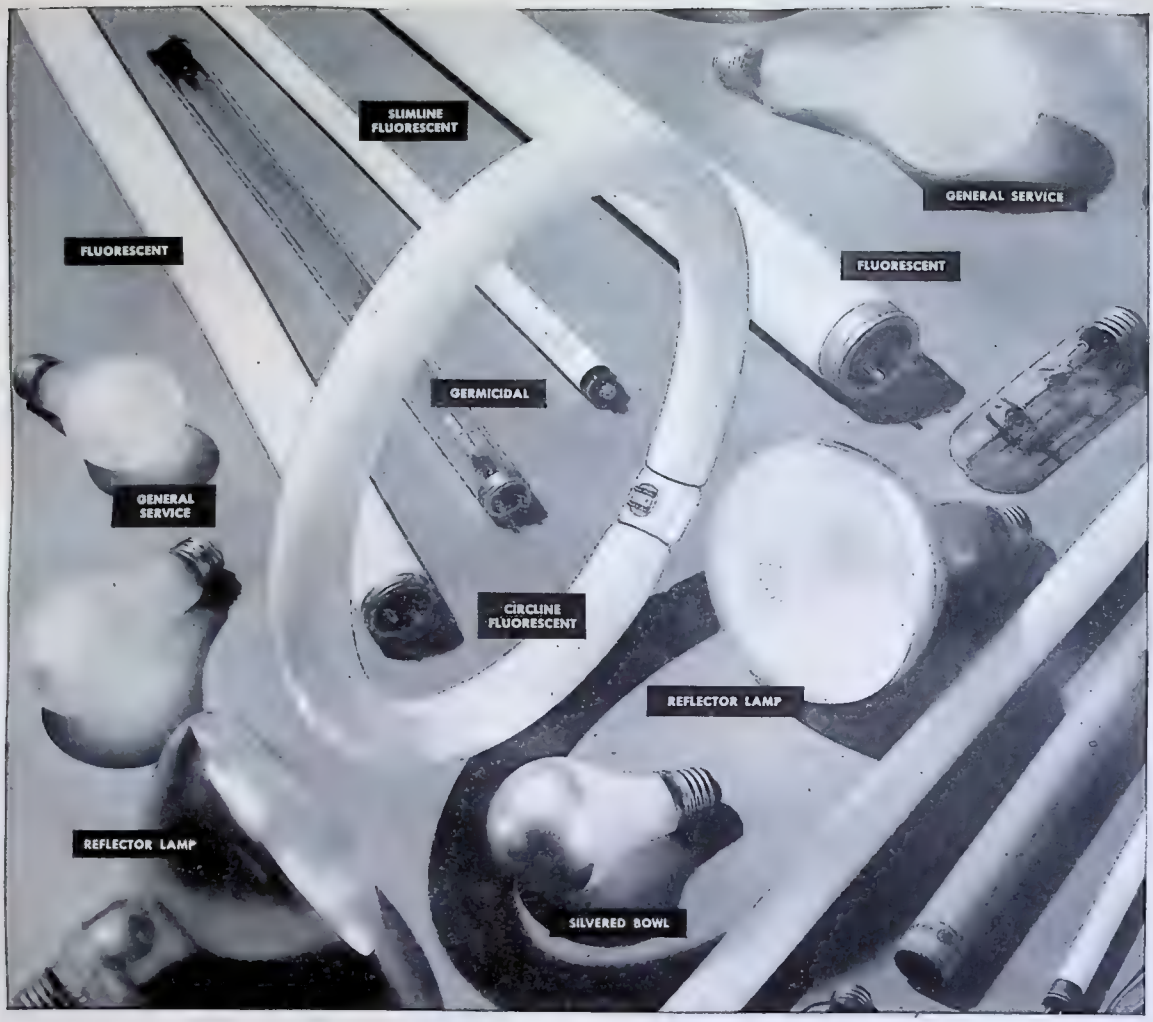
Safety AUTOMATIC FILM REWINDER

Passed by THE BOARD OF FIRE UNDERWRITERS. Accommodates 15" reels and smaller . . . reels slip on spindles quickly and easily. Equipped with automatic stop . . . made of heavy steel, carefully machined. Doors open on extra heavy counter-balanced spring hinges. Large handle keeps door perfectly tight. Has control handle for starting.

35 MM METAL SHIPPING CASES • METAL FILM EXCHANGE REELS • 16 MM REELS and CANS • 16 MM FIBRE SHIPPING CASES

GOLDBERG BROTHERS *Theatre Equipment*

3500 WALNUT STREET, DENVER, COLORADO



Select the lighting you need!

Be sure the lamps are marked

Whether you plan to build or remodel your theatre, you will find that there is a G-E lamp for every modern lighting need. For fluorescent light there are the general line, slimline and circline lamps . . . among the newer incandescent lamps are G-E reflector, projector and silvered bowl. Add to these, many other G-E lamps in 10,000 sizes and shapes!

G-E LAMPS

GENERAL ELECTRIC

Are Your *Washrooms* as Modern as Your Lobby?

ELECTRIC-AIRE *Evapo* Hand Dryers

Benefit Your Patrons

Dries hands in as little as 20 seconds—preventing skin roughness *and chapping*. Dries without scratchy unpleasantness of paper towels or contamination from soiled "end of towel" hanging from empty cabinet. Drying service *always* available—*always sanitary*.

And Benefit YOU in all these ways:

Provides cleaner, neater, more attractive washrooms, free of towel litter—impressive washrooms creating fine public relations.

●

No fire hazard from accumulated soiled paper towels.

●

No towel-clogged toilets, hence saving of costly plumbing bills.

●

Its continuous, automatic service greatly reduces janitor and maid service—prevents numerous complaints.

●

Eliminates unsightly towel containers and disposal units and marring of walls caused by them—eliminates the "garbage can" effect.

●

Saves buying, unpacking, storing, distributing, collecting and disposing of towels.

Saves 85% to 90% of cost and handling of towels—quickly amortizing its original cost.



Note the towel litter—and the disposal unit, which is a fire hazard!—also the general untidy appearance.



Now see how clean and attractive is the same room equipped with ELECTRIC-AIRE Evapo Hand Dryers that eliminate towels!



Types and Installations

Two types for wall mounting; semi-recessed and wall surface mounting. Each unit completely self-contained and mechanisms INTERCHANGEABLE. Push button, *automatic control* eliminates additional installation of foot control—dryer operates 37 seconds before automatically shutting off.

Units are compact—dimensions 6¾" x 15"—equipped with tested and approved quick-acting heating element of lasting strength and durability, with insulation to provide complete protection from any possible shock. *Automatic louvers* and nozzle guard completely protects against insertion of fingers or foreign substances of any kind—even water. Current consumption only 10% the cost of towels. Heavy coated, high temperature baked enamel finish in gleaming white with black trim is exceptionally durable.

ELECTRIC-AIRE backed by twenty-nine years of hand dryer engineering experience and subjected to years of gruelling tests under exceptionally trying conditions—the most dependable hand dryer available. *Installation specifications and roughing-in drawings promptly supplied upon request*

FOUR Exclusive Features

1. Locked nozzle louvers to prevent malicious and mischievous tampering with heating element or pouring of water into dryer nozzle. (Protected by basic patents).

2. Four minute removal of complete mechanism of dryer for possible emergency repairs or thorough cleaning of all parts without disturbing wall mounting cabinet.

3. The only Hand Dryer designed to change speed of fan for higher or lower air velocity to offset the effect of high or low voltage—without changing motor.

4. In 1970—when 20 years of research and engineering development make today's most modern electric hand dryers obsolete, Electric-Aire will require only replacement of the "floating in rubber" mechanism with all new improvement—no disturbing of built-in wall cabinet.

Fully Approved and Guaranteed!

ELECTRIC-AIRE is backed by 29 years experience in the hand dryer field and a 2-year guarantee.

ELECTRIC-AIRE is approved by Underwriters' Laboratories.

ELECTRIC-AIRE is recommended by the many theatres and other public institutions that use them.

ARCHITECTS!
Our AIA FILE 31-L with illustrations and complete specifications mailed on request. One of our trained field engineers will gladly call to demonstrate and discuss installation of ELECTRIC - AIRE Dryers.

A FEW REPRESENTATIVE THEATRE USERS
Standard Theatres Company, Milwaukee, Wis.
Kerasotes Theatres, Springfield, Ill.
Valos Theatres, Chicago, Ill.
Fox Intermountain Amusement Corp., Denver, Col.
Beverley Theatre, Bridgeport, Conn.
Lamont Theatre Service, Albany, N. Y.
North Avenue Outdoor Theatres, Chicago, Ill.
Detroit Theatres, Detroit, Mich.
Palo Alta Theatre, Palo Alta, Cal.
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Get all the facts (or demonstration) for your theatre or circuit. WRITE OR WIRE TODAY.

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Your best burglary protection is THIS Mosler Money Chest!



Cuts Safe Burglary Insurance as Much as 70%!

The Savings Quickly Pay for Your Safety!



Box-Office Chest in armored steel-cladded, reinforced concrete block. Phantom view shows 2 key inner door dividing upper and lower compartments.

For the protection of their box office receipts, leading theatres throughout the United States have installed in their Managers' offices Armored Steel Money Chests, built by Mosler—world's largest builder of safes and vaults.

The Mosler line of "X-60" chests are the finest burglary-resistive units built. Each chest is individually inspected by the independent Underwriters' Laboratories, Inc. to meet rigid standards of protection against severe burglarious attack, including explosives, and bears their "X-60" label.

In your own theatre one of these chests will do more than give you the assurance of safety against burglary. It will earn you a reduction on your safe burglary insurance premiums ranging up to 70%. Many theatres have found that the installation of a Mosler Armored Steel Money Chest qualified them as a preferred risk for insurance which they had previously been unable to obtain. Mosler Chests carry the Re-locking Device Label of the Underwriters' Laboratories, Inc., entitling the user to an additional 10% discount from the low "E" Mercantile Safe Burglary Insurance Rate. Mosler Chests also qualify for the "Double Burglarproof" rating on Money and Securities Broad Form coverage. Mosler Money Chests are securely embedded in steel-cladded concrete blocks, anchored and reinforced to prevent removal by burglars.

As an additional safeguard for receipts at the box-office, install one of the Mosler Vertical Box-Office Chests; it will minimize your loss in event of hold-up.

MAIL THE COUPON TODAY! The time to protect your receipts is *now—before* a hold-up or burglary occurs. Don't delay—fill out the coupon...send it in today!

The Mosler Safe Co.

Main Office and Showroom: 320 Fifth Avenue
LAckawanna 4-3800 New York 1, New York

Largest Builders of Safes and Vaults in the World

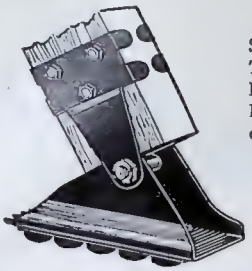
THE MOSLER SAFE CO., DEPT. TC
320 Fifth Ave., New York 1, N. Y.
Please send me full details, with information on how to save money on burglary insurance.

Name.....
Firm.....
Address.....
City..... *Zone*..... *State*.....

For Safety's Sake Use...

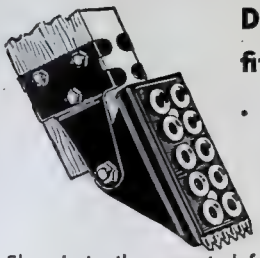
DAYTON SAFETY LADDERS AND SHOES

Rubber Tread In Position For Indoor Use.



Spiked Toe In Position For Outdoor Use.

"Listed by Underwriters' Laboratories, Inc."



DAYTON SAFETY LADDER SHOES fit any Standard ladder rails . . . easy to install

Install Dayton Safety Ladder Shoes on your present straight ladders—guarantee additional safety, prevent slipping

Shoe instantly converted for either indoor or outdoor use.

Shoe or base is made of No. 16 gauge and the side plates are of No. 13 gauge steel. Suction grip treads are renewable. Lock nuts and spring washers insure proper adjustment.

Sizes 3 feet to 16 feet in height with standard rubber safety shoes at no extra cost.



DAYTON SAFETY LADDERS

Maintenance men everywhere rely on Dayton Safety Ladders for maximum safety and convenience. Daytons are constructed of tested airplane spruce and reinforced with rigid steel supports to give great strength and lightness of weight.

Handrails of steel guard the large roomy platform for added safety. Half of platform can be raised to form an extra step, when needed. These famous ladders can be set up instantly, are easy to carry and fold compactly for storing. Automatic locking feature insures safety while ladder is in use.

DAYTON "ROLL-ALONG" SAFETY LADDERS

. . . The Dayton Roll-Along Safety Ladder with its rubber tired swivel casters can be speedily moved in any direction with practically no effort. Safety shoes with renewable treads hold ladder permanently and safely in place while ladder is occupied.

Constructed of tested airplane spruce throughout and reinforced with steel braces for additional safety. Folds compactly for convenient storing. Available in sizes 3-ft., 4½-ft. and 6-ft.

Elevating auxiliary platform which folds back in main platform adds height if desired. These ladders are being used in many of America's largest plants. See for yourself! Write today for bulletin.



FOR SAFETY'S SAKE . . .
consult our SAFETY DEPARTMENT . . . we have the complete line of safety equipment for your every requirement.

WRITE TODAY FOR BULLETIN 25

DAYTON SAFETY LADDER COMPANY

2337 GILBERT AVENUE • CINCINNATI 6, OHIO

AND THE DEAF SHALL HEAR!

THE TELESONIC THEATREPHONE SYSTEM

The Telesonic System is patented and the word "Telesonic" is registered as a U.S. Trademark.

A simple practical patented system that eliminates all the nuisance and restrictions of specifically wired seats, and enables any Hard of Hearing patron **to sit and hear in any part of the Theatre** and even while walking about.

Lew Wisper of Wisper & Wetsman, owners of theatres, wrote the following about the Telesonic installation in the Harper Theatre in Detroit:

> I am pleased with the advantages of the Telesonic System. It eliminates specially reserved seats. Patrons sit where they choose—
>
> As far as repairs, we have had no repairs since installation a year ago. Our patrons are very pleased and as a natural consequence, so are we—
>
> Sincerely,
>
> HARPER THEATRE
> Lew Wisper, President

Sonny Shepherd, director of the New Wometco Miami Theatres says about his Telesonic Theatrephone installation:

> I am sure your patrons will be satisfied with the results. We find our patrons are especially pleased with the fact that they can sit in any part of the house and use the Telesonic hearing aid—
>
> The Telesonic Equipment will certainly pay you in the long run.
>
> SONNY SHEPHERD
> Managing Director
> The Miami Theatre

The Telesonic System will open the doors of your theatre to the thousands who do not now attend because of their defective hearing.
These are

THE MISSING TENTH!



The little box you see Mr. Lehman holding in his lap is the Telesonic unit that picks up the program out of the air and brings it to any place within the theatre.

The Telesonic Theatrephone System picks up the programs by Audio-frequency induction, **requires no wiring or specially reserved seats.** It can be quickly and easily installed and maintained in any new or old theatre by your house electrician, electric contractor or service organization at reasonable cost without interfering with your projection schedule.

In addition to the service gesture and local prestige that will accrue, the installation of the Telesonic Theatrephone System **will prove a most profitable investment,** the return from which will immediately become evident through increased admissions from hard of hearing people and their friends, who will come to your theatre from miles around.

We will be pleased to supply full information, installation specifications, wiring, and maintenance instructions.

Charles H. Lehman, *President*

TELESONIC THEATREPHONE CORPORATION

3 EAST 48th STREET, NEW YORK 17, N. Y. MU 8-2670-1

BOOK THREE:
Management

Methods, Practices, and Maintenance

1949 NATIONAL CENSUS OF THE THEATRE INDUSTRY 482
Pertinent Details Regarding Operation, Structure, Equipment, and Methods Never Previously Surveyed

MODERN THEATRE REQUIREMENTS...*R. H. McCullough* 490
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METHODS, PRACTICES *and* MAINTENANCE

1949-50

1949 National Census of the Theatre Industry

Pertinent Details Regarding Operation, Structure, Equipment, and Methods Never Previously Surveyed

In any other American industry with the size and scope of the motion picture, there are quite creditable statistics of its physical assets, whether they be punch presses or rowboats, that are established and annually revised by the various trade associations within it. These trade associations, representing the various facets of any industry, normally work in close harmony in many ways to the aggrandizement of their industry; and the aforementioned well-organized and well-interlocking statistics are a valuable by-product of such cooperation on which the individual members can draw for the preparation of speeches, surveys, tax appeals, or the hundred and one other needs which arise in their daily contacts with other industries and with the general public.

Partly due to the highly competitive nature of the motion picture industry, where a tremendous premium rests on the originality of ideas and the particular personal abilities of individuals, there has always been a dearth of firm, creditable statistical data about it.

The rivalry between studios, the executives who run them, and the financial institutions which finance them, have buried irretrievably any creditable data on: the costs of sets, the amount of film shot that does not appear in the final release, the payrolls in either dollars or people, or anything else that might reflect to the public the efficiency, or lack of efficiency, of the particular operation. Therefore, rough gross estimates by annual volumes, trade papers, and the U. S. Department of Commerce are the only records available.

In distribution, there are slightly more creditable data available, although very few executives indeed are willing to be quoted on the number of dates or volume of dollars obtained on any one picture, or group of pictures, for fear their revelations will be used later against them by both producers and exhibitors. Therefore, once again, only very rough gross estimates are hazarded or published.

In exhibition, a similar rivalry and competition exists. At least two national trade associations and numerous autonomous local ones distrust and impede one another, with only some Government effort or important industry threat able to persuade them to sit down in one room. The great diversity in size and location between some small theatre in the Ozarks and the big Radio City Music Hall, added to the locational spread in every nook and cranny of the nation with a wide assortment of ownerships and management methods, also makes statistics about this division of the industry very difficult to accumulate and classify. Thus, once again, only gross estimates have been available.

BRIEF: ***The crying need for creditable statistics on theatre physical equipment, operational methods, costs, etc., demanded that someone seek out this information and publish it for industry consumption . . . The editors of THEATRE CATALOG sallied forth to meet this challenge . . . by going directly through the mails to the managers and owners of the nation's 18,600 theatres . . . . . . The postman carried the inquisitive researchers up and down rugged mountains . . . as well as along the highways and byways of the country's thriving metropolitan areas . . . Every theatreman . . . be he operator of a tiny 100-seater or a mammoth 3,000-seat exhibition hall . . . was consulted and his reply given careful attention.***

Although fully as resolute as Don Quixote, the "knights" . . . who set out on this quest for a true picture of the industry . . . were not "quixotic" in their methods . . . No imaginary windmills were assailed with lances . . . Only direct questions were put before the men who run theatres . . . in the East and West, North and South, of these United States . . . Their replies . . . which amounted to a reliable 6% return for calculation purposes of the total number of the nation's theatres . . . have been carefully tabulated, checked, and examined in the light of limited known facts and industry estimates . . . The "package" they represent . . . based on a higher percentage of returns than is used by the national survey polls . . . is an irrefutable picture of the theatre industry as it stands today . . . Facts and figures are available to support every assertion made . . . In short, no stone has been left unturned to present to the industry an unbiased and precise view of its own inner workings . . . with regard to such important general considerations as equipment and facilities, confection vending, etc.

It is our pride and our privilege to present this industry CENSUS . . . with the fond hope that it will prove of inestimable value to the theatre owner, manufacturer, architect, builder . . . and all others to whom the motion picture house is an important segment of modern Americana.

Probably the most reliable published source of theatre industry statistics in the past has been the annual **Film Daily Year Book**, in the preparation of which great efforts are expended to accumulate, from executive opinion and scattered fact, at least a few creditable statistics on theatre opinion.

In recognition of this condition from their own needs over the past nearly 32 years of industry trade press activities, the editors of EXHIBITOR (Weekly) and THEATRE CATALOG (Annually) decided to conduct during 1949 the first NATIONAL THEATRE CENSUS ever attempted. Patterned after the many national surveys of public opinion, which in all but one major case, have accurately forecast conditions and tastes through careful analysis of a typical "package" of adequate size, and leaning on the knowledge gained through a National Survey of Theatre Confection Vending taken in 1947, this first overall census was conducted during the months of October, November, and December, 1949. A census form was mailed to the manager or owner of each of the round-total 18,600 theatres now in operation and on file in the publishing offices. The questions were direct and without lead. And spotted throughout were checking questions designed to verify any opinions expressed.

In accordance with the guarantees made to each recipient, the replies were analyzed upon receipt and reduced to spread sheets which eliminated the ownership or address indentification from all future computations. Where a misunderstanding or an obvious contradiction appeared in the answer to a particular question, the reply to that question was eliminated entirely, so that all totals were clear and exact without the possibility of conveying an inaccurate result which might affect the total findings.

After such deletions, the total "package" analyzed represented approximately 6% of the total theatres in the United States; a considerably higher percentage than that which survey bureaus have estimated to be necessary to estimate accurately overall conditions.

To further check the nature of the "package" and to determine whether or not it was truly representative of the nation as a whole, checkable findings were contrasted with the few recognized theatre statistics as published in the 1949 Edition of **Film Daily Year Book** with the following results:

(a) The average size of the theatres in the CENSUS "package" was 514.5 seats, while the **F.D.Y.B.** average for 19,323 theatres of all types, as of Jan. 1, 1949, was 606.5 seats; (b) the average admission scale for the CENSUS "package" was 41.45 cents, while the **F.D.Y.B.** estimate for 1948, when slightly lower prices were known to prevail, was 40.11 cents: and (c) the average number of shows per day in the CENSUS "package" was 2.4, while the **F.D.Y.B.** average for 1948 was 2.5. It could again be deduced from the closeness of these totals that the CENSUS "package" was truly representative.

SUMMARY OF THE "PACKAGE" ANALYZED

On the spread sheets all replies were entered in accordance with their size

Table No. 1

Size:	*1 to 500 Seats*	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
1. Average Theatre Size	349 Seats	690 Seats	1412 Seats	514.5 Seats
2. Percent of Total	63.1%	31.4%	05.5%	100.0%

Table No. 2

Average Top Evening Admission Scale:			
1 to 500 Seats	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
39.6 cents*	43 cents*	52.5 cents*	41.45 cents*
*Price Range:			
(10 to 75 cents)	(24 to 98 cents)	(27 to 85 cents)	

Table No. 3

Picture Run:	*1 to 500 Seats*	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
1. First Run	75.7%	57.0%	60.5%	69.8%
2. Second Run	06.4%	14.5%	11.6%	08.1%
3. Subsequent Run	17.9%	28.5%	27.9%	22.1%

Table No. 4

Number of Shows per Day:			
1 to 500 Seats	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
2.13 shows*	2.80 shows*	3.40 shows*	2.40 shows*
*Range of Shows per Day:			
(2 per week to 12 per day)	(1 per day to 12 per day)	(1 per day to 6 per day)	

Table No. 5

Location:	*1 to 500 Seats*	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
1. Small Town	85.5%	53.3%	23.0%	71.6%
2. Large Town and City	14.5%	46.7%	77.0%	28.4%

classification as containing either from 1 to 500 seats, from 501 to 1000 seats, or from 1001 seats and over.

Size

Table No. 1 illustrates the percentage of each size under each of these three classifications, together with the resultant average seating capacity which is maintained. It is interesting to note that two of the entries were from theatres containing only 100 seats each, while one covered a theatre of 3,500 seats. Once again, the normal industryite will recognize these averages as fairly representative of accepted industry views.

Admission Scales

While the CENSUS form requested data on all admission scales, and the resultant spread sheets reflect a full range from the children's matinee to the adult evening and special loge price, the most significant was deemed to be the adult evening, normally considered to be the basic price for any particular theatre. The adult evening admission price for the entire CENSUS "package" averaged 41.45 cents, with a marked rise in average from the small theatre to the large one that can very logically be attributed to the average location of the latter, as will be shown below. It is also significant that the price range of minimum and maximum admission scales was considerably lower in the smaller theatres catering to the larger percentage of small town and family patronage.

The detailed breakdown of admission scales in the three size classifications can be noted from Table No. 2.

Picture Run

The question dealing with the average run or freshness of pictures enjoyed by the theatres analyzed does not bear great significance in the smaller 1 to 500 seat class because the great majority are situated in small towns, where these theatres are not only the first-run but also the only run. In the two classifications above 500 seats, however, where large town and city theatres are better represented, it can be noted that more than 70% of the CENSUS "package" analyzed are in the important first and second run category. Table No. 3 shows the manner in which this run changes in relation to size.

Number of Shows per Day

In the CENSUS "package" analyzed, the average theatre nationally seems to put on 2.40 shows per day; but, once again, size and location create a wide variance. Some of the theatres indicated as few as two shows per week, while two of them were large city 24-hour grind houses that cram in 12 shows per day. Once again, the "package" was truly representative of all types and classes of theatres, and the fluctuations in their operating policies can be noted from Table No. 4.

Location

The question dealing with location is important in any consideration of other totals. All lists of existing operating theatres in the U.S.A. reflect addresses in a round total of 10,000 different cities and towns of various sizes, and, since a certain percentage of relatively small towns have competing theatres, the 71.6% small town national average developed by the CENSUS "package" analyzed is very creditably an authentic picture. Once more, as indicated in Table No. 5, the size of the theatre bears relationship to the size of the community it serves.

Type of Patronage

In type of patronage, the CENSUS "package" repeats its support of the national industry belief. The transient patron of the main stems has a great variety of entertainment from which to choose. Sporting events, night clubs, bars, and a host of other diversions compete for the transient dollar to the place where it cannot be considered of great importance to the support of a large national industry. The motion picture theatres situated in the neighborhood, shopping center, and small town provide the major entertainment outlet for the entire family, from the juniors on Saturday afternoon to their parents on their night out. Table No. 6 shows the manner in which size, and again presumably location, influences the family and transient patronage, but the complete dominance of the former in all size brackets.

Table No. 6

Type of Patronage:	*1 to 500 Seats*	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
1. Family	95.2%	95.0%	90.5%	95.0%
2. Transient	04.8%	05.0%	09.5%	05.0%

Table No. 7

Business Affiliation:	*1 to 500 Seats*	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
1. Circuit or Buying Group	30.0%	51.5%	87.9%	39.7%
2. Independent	70.0%	48.5%	12.1%	60.3%
3. Average Ct. or B.G. Size	25.5 theatres	35 theatres	30 theatres	
4. Average Ct. or B.G. Range	2 to 160 theatres	2 to 500 theatres	2 to 120 theatres	

Business Affiliation

Whether the single theatre is operated as a single enterprise, or as part of a group of various sizes, is important to any broad consideration of its methods, buying power, or position in the community. The tabulations under Table No. 7, therefore, reflect such affiliations, or lack of them, and bring to a conclusion this analysis of the quality, size, operational methods, and management of the CENSUS "package" from which the following very important conclusions have been drawn.

It is the belief of the entire group of statisticians and editors, who have spent hundreds of man hours in the careful organizing, tabulating and study of the replies which compose this "package," that the theatre owners who cooperated were sincere and honest in their realization that such data were necessary to the future progress of their industry, and accordingly gave truthful and detailed answers; that since every single portion of the foregoing summary coincides in varying degrees with the limited known facts, the opinions and the estimates of experienced and qualified industry observers, the completely unknown and impossible-to-estimate data resulting from this survey are also accurate and can be used with confidence, and that, here for the first time in the history of this great motion picture industry, are complete statistics covering the physical plant and operational methods of the exhibition branch. As this branch represents the source of all domestic industry income, the importance of such data is obvious.

EQUIPMENT AND FACILITIES IN THE NATION'S THEATRES

Considered as one of the important points to be developed in this first NATIONAL THEATRE INDUSTRY CENSUS was: Just what kind of buildings are these 18,600 theatres, how are they equipped, and what modern comforts or conveniences do they offer to the nation's 90 million weekly patrons?

As a result only five specific questions were asked on this point in the fear that to ask more might prove discouraging and unduly labor the cooperating theatre owner. In succeeding annual efforts different items will be studied so that every five years a well-rounded and complete picture will result.

Air Conditioning and Cooling

The first question dealt with the facilities for patron comfort in the form of cooling or air-conditioning provided by the theatre. Again, tabulated under the same three size classifications, the results as shown under Table No. 8 are interesting and thought-provoking.

Table No. 8

Air-Conditioning and Comfort Cooling:	*1 to 500 Seats*	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
1. Full Refrigeration	12.0%	34.0%	50.1%	21.1%
2. Water in Some Method	49.9%	34.0%	23.9%	43.4%
3. Air through Fans and Blowers	21.7%	11.8%	13.0%	18.1%
4. Nothing at All	16.4%	20.2%	13.0%	17.4%

In theatres under 500 seats, the use of water as either a cooling, washing, or evaporative method was by far the most popular. In the intermediate size theatre, refrigeration and water shared the majority choice. And in the large theatre, true mechanical refrigeration was most commonly used.

Applying the national average to the known round total of 18,600 theatres in operation, it would seem relatively certain, that with a variance of possibly 100 theatres one way or the other, there are 3,925 U.S. theatres that have complete mechanical refrigeration, 7,972 that use water in some method, 3,367 that use fresh, outside air delivered through fans or blowers but without any facilities to clean or cool it, and 3,246 that have no equipment whatsoever; or still more understandable, because true air-conditioning is possible with water, as well as with mechanical refrigeration equipment, there are 11,897 U.S. theatres equipped with air-conditioning with varying degrees of efficiency, while there are 6,613 that have no air-conditioning at all.

To the executive, both inside and outside of the theatre industry, with an upper-bracket pocket book who patronizes only main stem or upper-bracket suburban theatres, the above totals may come as a surprise. But the several film salesmen and working members of the theatre supply field, who call regularly on theatres of all sizes and types even in metropolitan areas, and who have been consulted, agree with the accuracy of the above.

Carpeting and Floor Covering

Another point of importance in modern theatre operation is carpeting. Increasingly expensive to buy, install, and maintain since the war, carpeting can be considered as one of the more perishable types of theatre equipment that should be completely amortized and replaced every eight years under normal conditions of traffic flow. However, it is considered to be indispensable to the quality presentation of talking motion pictures, not only because of its decorative and furnishing qualities, but because its soft surface deadens the sound of footsteps and traffic movement that might detract from the enjoyment of the seated patrons. Accordingly, the question was asked as to whether or not each theatre was carpeted and, if so, in which particular areas. The findings in Table No. 9 reflect the answers by size groups.

Again, the deluxe operation of fully carpeted theatres increases with the size and very probable location demands to the place where only 39% of the theatres under 500 seats are fully carpeted, while theatres of more than 1000 seats are over 81% fully carpeted. Projecting the national average of this survey to the known grand total of 18,600 U.S. theatres, it is indicated that (again with a 100 theatre leeway one way or the other) there are 8,519 fully carpeted theatres, 5,115 theatres with only the aisles carpeted, 1,042 with carpeting in some areas but not in the aisles, and 3,925 theatres with no carpeting whatsoever.

Table No. 9

Carpets and Areas Carpeted:

	1 to 500 Seats	501 to 1000 Seats	1001 Seats and Over	Average
1. Fully Carpeted	39.0%	50.0%	81.4%	45.8%
2. Aisles Only Carpeted	23.1%	36.1%	14.0%	27.5%
3. Other but not Aisles	05.1%	07.4%	0.00%	05.6%
4. No Carpeting	32.8%*	06.5%*	04.6%*	21.1%*
*Of these the following number wrote in reference to Rubber, Tile, and other Hard Surface Floorings:	07.8%	00.2%	0.00%	04.5%

Table No. 10

Theatre Seats and Types:

	1 to 500 Seats	501 to 1000 Seats	1001 Seats and Over	Average
1. Upholstered	71.0%*	85.6%*	93.1%*	76.7%*
2. All Veneer or Veneer Sections	29.0%	14.4%	06.9%	23.3%
*Of these the following claimed to have the retractable type	2.9%	07.4%	04.8%	05.0%

The totals relating to the use of rubber, tile, and other hard surfaced floorings in areas that would be normally carpeted, result from voluntary write-ins by the owners themselves, for this question was not asked in the CENSUS form. The frequency with which this information was transmitted (nearly 8% of the total) in theatres of less than 500 seats is actually surprising and shows a sharply increasing use of these types of materials, which factor will be surveyed more completely in a later annual effort.

The projection of these carpet totals in a different manner to arrive at a fair estimate of the theatre industry's total use of carpet yardage provides further interesting totals. Several executives, specializing in the sale of carpeting to theatres, were asked for their opinions as to the average yardage ordered for the recarpeting of theatres in the three size classifications, and have agreed that: under 500 seats the average order is 250 yards; from 500 to 1000 seats the average order is 500 yards; and for a theatre of 1,412 seats, which is the over-1000 average of this survey, the average order is approximately 700 yards. Applying these yardage estimates to the national average of this CENSUS "package" and then to the known 18,600 U.S. theatres, it is very logically certain that the fully carpeted theatres alone represent 31,427,622 yards currently in use. This figure, of course, ignores the theatres with only carpeted aisles, and those with carpeting in other areas but not in the aisles, a factor which would materially increase the total yardage figure.

In the above connection, it is interesting to note that both recommended industry practice and Federal tax allowance depreciate theatre carpeting on the basis of an eight-year life expectancy. Under any normal traffic load, and even benefitted by the good practice of lifting and relaying periodically in order to move the wear areas, this is the useful life of average theatre carpeting. However, even if this period of use life is stretched to ten years, just the fully carpeted theatres of the U.S. annually need for replacement purposes alone 3,142,762 yards of carpet. Since such purchases are made as often through a local department store or merchant as through the theatre supply dealer, statistics on theatre carpet use are among the more obscure and difficult to obtain, to the place where it is doubtful whether the manufacturers themselves realize the tremendous volume that goes to this one industry. It seems relatively safe to estimate, however, that adding the partially carpeted to these fully carpeted theatres, the industry's annual average use is somewhere in excess of 4,000,000 yards.

Table No. 11

Stages and Types:

	1 to 500 Seats	501 to 1000 Seats	1001 Seats and Over	Average
1. Apron Only	26.3%	30.0%	16.3%	26.9%
2. Small Stage	66.0%	47.1%	32.5%	58.1%
3. Large Stage	07.7%	22.9%	51.2%	15.0%

Seats and Types

Of equal interest with carpeting are theatre chairs, which, while enjoying a permitted depreciation over a 20-year use life, may be classed as semi-perishable in nature due to the spring construction and covering materials of the most popular upholstered type. As the next comfort facility to be surveyed in this CENSUS "package," the findings are tabulated under Table No. 10. From this the reader will note that the use of upholstered chairs again follows the size range, with the largest percentage of use (93.1%) in the largest theatres, where the admission scale, patronage demands, and larger municipality locations dictate greater patron comforts. The growing use of the retractable-type chair is also making itself felt in the national picture. For the purposes of this survey, if any portion of a chair was veneer it was classified as a veneer chair. Therefore, this classification includes all veneer backs with upholstered seats, padded backs with veneer seats, etc.

Projected nationally to the 18,600 U.S. theatres, this survey would indicate that some 14,206 theatres boast fully upholstered chairs, while the balance of 4,394 theatres have something less than fully upholstered all the way down to the all-veneer "squab" seat.

Stage Facilities

In view of the many potential uses of the motion picture theatre for occasional "flesh" entertainment, for a temporarry church, and for a civic auditorium serving its area, it was believed important to ascertain the extent of the stage facilities possessed by the nation's theatres. From the replies in this national CENSUS "package" were tabulated the findings under Table No. 11. Once again, the findings are logical and follow the usual pattern of the size and location demands. The relatively few small theatres with large stages appear to be throwbacks to the days of vaudeville and the legitimate stage, for they are virtually all in larger communities. The tiny stage apron, which most often is designed as a dress for the proscenium, rather than for any entertainment use, shows an important total; but is far overshadowed by the most popular small stage.

Again, projecting these percentages into whole theatres throughout the nation, it would seem that 13,597 theatres have stage facilities and space of some order, while 5,003 would find their tiny stage aprons inadequate for more than a speech or public announcement.

Parking Facilities

The constantly increasing use of automobiles as the most popular transportation medium, bringing with it the shopping center theatre and the drive-in theatre as very natural by-products, has focused a lot of industry thinking on the theatre need for parking lots and parking facilities. Building codes of many municipalities now insist that adequate off-street parking be available for new theatres, just as for new stores or other places of public patronage. As a result, the last question in this section

Table No. 12

Parking Lots and Parking Facilities:

	1 to 500 Seats	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
1. Adjacent to Theatre	14.7%	25.1%	28.6%	18.5%
2. Close to Theatre	06.3%	17.4%	21.4%	10.7%
3. Not Needed for Many Reasons	59.3%	26.7%	11.9%	42.0%
4. Have None but Needed	25.1%	30.8%	38.1%	28.8%

of the national CENSUS dealt with parking facilities and the theatre owner's belief in their need in his particular location. Of particular importance in the findings, as tabulated under Table No. 12, is the fact that insignificant need for parking by the smaller theatre in predominantly rural or small town locations becomes a very grave need as the capacities increase. Even though Table No. 5 shows that more than 53% of the intermediate size theatres are in small towns, only 26.7% of the owners of theatres in this class feel they don't need parking. In the larger theatres, there are only 11.9% of the owners who share this feeling.

Projected nationally to the 18,600 theatres in the United States, this survey indicates: that only 5,431 of the nation's theatres have parking lots of their own, or those which belong to someone else but are available to their patrons in the vicinity; that 7,812 of the nation's theatres do not feel any need for parking facilities; and that 5,357 of them feel a desperate need for parking as a patron service.

THEATRE CONFECTION VENDING

It is interesting to note, in connection with the theatre sale of confections both as an "extra profits" venture and patron service, that some three years ago in 1947, the publishers of the EXHIBITOR (Weekly) and THEATRE CATALOG (Annually) were first to recognize the rising growth and importance of such vending; and a similar National Survey was conducted at that time which gave to the industry the first creditable statistics on this operational facet that it has ever had. Many of the questions asked in this earlier survey are similar to those covered in the current national CENSUS; and, laid side by side, they mark several very interesting developments in patron habits and theatre merchandising methods that, wherever possible, will be referred to in the following text.

One very significant comparison deals with the fact that in the 1947 survey, while 94.4% of the replies indicated vending of some nature, 5.6% of the nation's theatremen specified sometimes violent opposition to anything besides motion picture entertainment being sold in a motion picture theatre. In the current national CENSUS "package," each and every collaborating theatre owner specified confection vending of some nature, running the full range from the minimum candy vending machine to the maximum of a complete luncheonette. It would seem that in the intervening years even the most complete die-hards have been converted; and no doubt a great share of this complete 100% picture can be attributed to the patrons themselves, who like to have a snack of some sort with their evening's entertainment. Only the location of the theatre, and the type of its patronage, controls the extent to which that snack can be carried. It may seem facetious, but it is certainly conceivable, that in the few 24-hour "grind" houses spotted through the larger cities of the nation, a shave, a shower and dressing room, or a box of aspirin and some Murine for the eyes, could be served with profit if the space and facilities permitted. Each theatre is different in its patron demand, but there is no doubt that patron demand both made and developed the really big business of theatre confection vending over the constantly diminishing protests of many theatre executives and several of the larger segments of the industry trade press. Among the latter, some of the most flaming editorials lambasting theatre owners for giving attention to popcorn and potato chips, instead of devoting 100% attention to their screen entertainment, appeared as recently as 1948, whereas their pages are now opened wide to both the publicity and advertising of the machinery and supplies that make such vending possible. This is not criticism, but is cited as proof that the patron made the theatre vending business, and can break it just as quickly should his tastes change.

Types and Locations

In the approach to the portion of the national CENSUS devoted to confection vending, all questions were developed in order to learn the most successful vending methods, the merchandise, and the patron acceptance, and again the findings were tabulated under the three theatre size classifications. The first question dealt with the types and locations of the vending installations and whether they were mechanical or personally attended. Among the answers were numerous references to the combination boxoffice and candy stand, and to adjacent stores with counters or doors into the lobby area, but, to facilitate tabulation, all such replies were included under "lobby stands and stores." From the findings, it will be noted that there was little variance by size classification in the use of mechanical vending machines alone. It would seem that this small differentiation partially reflects lack of the necessary space for a counter installation, while others reflect either an actual or imagined clientele that would resent a major vending effort. The vending machine is not dead, however. Its use, in both the smallest and largest theatres as an adjunct to the candy stand in the more remote areas of balconies, lounges, etc., plus its use as standby equipment during the matinee and off hours when the personally attended stand could not be profitably operated), formed a very important percentage, to the place where vending machines are found in 31.9% of the nation's theatres. Projected into whole theatre totals, this reflects a current use of vending machines in 5,933 of the nation's theatres. The still more important lobby stand and store, which has really developed the current tremendous gross annual volume, is however the dominant leader in all size classifications. There is a slight superiority for this type of equipment in the smaller theatres, which tends to diminish through the intermediate and larger ones, where vending machines increase in popularity. However, projected into the national picture, it is found that 12,647 theatres have personally attended lobby stands, ranging from a corn popping machine and storage table to a complete and well-staffed alcove or store where candy, popcorn, beverages, ice cream, chewing gum, cigarettes, and every now and then, hot dogs and coffee are profitably vended.

Who Operates

Statistics relative to the executive operation (i. e., whether the owner or manager purchased his own stock and hired and supervised the attendant; or whether some outside concessionaire, not identified with the management and ownership of the theatre, took responsibility for such details under a guaranteed return to the theatre of a specified percentage of the gross) produced some widely varying totals, the interpretation of which required a basic knowledge of the theatre industry. First of all, the services of a concessionaire are mainly available only in states with large population concentrations, such as in the Metropolitan East, the Central West, and on the West Coast. The very theory of the concessionaire's operational efficiency is based on his ability to warehouse

Table No. 13

Types and Locations:

	1 to 500 Seats	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
1. Vending Machines Only	02.7%	04.1%	07.1%	03.4%
2. Lobby Stands and Stores	70.0%	66.5%	57.1%	68.1%
3. Both	27.3%	29.4%	35.8%	28.5%

Table No. 14

Methods of Operation:

	1 to 500 Seats	501 to 1000 Seats	1001 Seats and Over	Average
1. Operated by Owner	85.4%	77.2%	47.6%	80.5%
2. Operated by Concessionaire	14.6%	22.8%	52.4%	19.5%

centrally large quantities of merchandise, and to train and supervise better sales personnel. When concession stands are too thinly spread over a wide area, there is a decline in this efficiency and in their profitable operation. As a result, there are large sections of the nation where important theatre confection vending grosses are obtained but where there is no major concessionaire service available. And this is certain to show up in any broad scale national statistics.

It is also known, that where the ownership controls a multiple number of theatres, and therefore the operation of the candy stand would be delegated to, and supervised by, an employee-manager rather than direct ownership, there is a greater tendency to call in and depend on the more experienced operation of the concessionaire when available. These two points of location and ownership-management show up in the preponderance of owner-operated vending in theatres of the smaller classification. In the intermediate size classification, there is a falling off in owner operation in favor of the concessionaire, and in the larger theatres of 1000-and-more seats, situated mainly in the more concentrated population areas, there is a complete reversal of the trend to a majority for concession operation. So pronounced is this swing that it is a little dangerous to apply the findings in this CENSUS "package" to national theatre totals, but, for whatever their value may be, the application to the 18,600 theatres of the United States would produce the following totals: confection vending under the active operation and control of the theatre itself in 14,973 theatres; and confection vending under the active operation and management of a concessionaire in 3,727 theatres.

Table No. 15

Preparation and Sale of Popcorn:

	1 to 500 Seats	501 to 1000 Seats	1001 Seats and Over	Average
1. Own Popper	80.6%	76.6%	47.0%	77.6%
2. Popped elsewhere and sold from Warmers	15.9%	21.0%	50.3%	19.3%
3. Popped elsewhere and sold in Packages	03.5%	02.4%	02.7%	03.1%

Popping Methods

In recent years there has been considerable discussion within the industry on the relative merits of the popcorn machine for on-the-spot popping, and of the popcorn warmer for the warehousing of corn that has been popped elsewhere. Throughout the country there are certain sections where fire and safety authorities have forbidden the use of the former in theatres, claiming the danger of flash fires from the use of cooking oils and fats in the popping process. While it has been observed that the same authorities permit the use of poppers in neighboring department stores, where a greater total attendance is present under one roof, and where neither the fireproof construction or exit facilities exist, so that the sincerity of the reason is open to question, this attitude has eliminated such areas from any national picture. There are also certain owners who believe that the warmer has less smell and fits better into a quality operation, while others believe that the assured freshness and smell contribute materially to their gross sales.

Without attempting to take sides, or to favor this discussion one way or the other, the cooperating theatre owners were asked the simple and direct question as to just how they prepared and sold their popcorn. The complete dominance of the popper in the smaller and intermediate size theatres is obvious, and again may reflect to a certain degree the preponderance of owner operation in such theatres. In the larger theatres, it is certain that the use of a popper pretty closely follows the executive management. While the question was asked as to whether there were cases where the corn was popped elsewhere and sold in packages, it did not specify whether a warmer might be used in the process; thus the editorial staff is quite certain, after carefully reviewing these replies, that the majority should be added to the use of warmers, and thereby obtain a definite line between on-the-spot popping and popping elsewhere.

Projecting this latter line of reasoning, the findings would indicate that of the 91.3%, or 16,982, of the nation's theatres which handle popcorn, 13,178 of them use poppers, while 3,804 of them sell corn that has been popped elsewhere.

Table No. 16

Handling of Beverages:

	1 to 500 Seats	501 to 1000 Seats	1001 Seats and Over	Average
1. From Bottles	30.1%	16.7%	10.3%	22.3%
2. From Fountain Dispensers	44.7%	40.3%	43.6%	42.7%
3. From Vending Machines	25.2%	43.0%	46.1%	35.0%

Handling of Beverages

The theatre vending of beverages has also come in for a considerable amount of discussion and varying opinion. It seems to be accepted that both the patron and theatreman feel that drinks dispensed from a bottle, which has been uncapped specially for a particular sale, are more uniform both in quality and volume. However, bottle vending has certain definite disadvantages. First of all, heavy cases of bottled drinks must be carried into the theatre lobby, and, under any paying volume, space must be available there where they can be stored without becoming a complete eyesore to everyone concerned. Second, because the hazard of bottles underfoot and of breaking glass in the darkened auditorium does not permit issuing the bottle to the patron, the attendant must pour its contents into a large paper cup. And third, the slowness of pouring, and the quick release of the bottled effervescence of the drink itself, makes this selling method slower than that of any other sale, with a resultant jamming of not only the beverage, but all other confection vending at periods of peak load.

Offsetting this somewhat are the basic needs for cleanliness and sanitation both inside and outside of a fountain dispenser or drink vending machine, factors which travel back to the bottling plant in the form of empty bottles when the bottle method is used. In recent years, therefore, there has been a constantly increasing sale of bulk dispensing equipment, a trend which shows up prominently in the replies to the question dealing with the handling of beverages as delineated in Table No. 16.

From this table it will be noted that the use of bottles is more common in the smaller theatre, where the volume of sale also limits the investment in dispensing equipment. In the intermediate size and large size theatres, however, the use of dispensing and mechanical vending

Table No. 17

Survey of Merchandise Handled:

	1 to 500 Seats	501 to 1000 Seats	1001 Seats and Over	Average
1. Candy	76.3%	93.4%	100.0%	83.0%
2. Popcorn	91.3%	90.1%	70.7%	89.6%
3. Beverages	35.4%	63.4%	75.6%	46.4%
4. Ice Cream	14.2%	40.0%	41.4%	23.7%
5. Chewing Gum	42.0%	57.9%	34.1%	46.2%
6. Cigarettes	13.5%	26.2%	20.0%	17.7%
7. All Four Items: Candy, Popcorn, Beverages and Ice Cream	11.4%	35.5%	39.0%	20.4%
8. Candy Only	06.6%	06.5%	10.0%	06.8%
9. Popcorn Only	19.3%	05.4%	0.00%	13.9%
10. Candy and Popcorn Only	36.0%	21.3%	14.6%	30.3%

equipment moves into a dominant popularity. It is in the larger theatres that the peak load makes speed of operation the controlling influence.

Projected nationally into whole theatres, the replies to this question in the CENSUS "package" indicate that of the 46.4%, or 8,630, of the nation's theatres which sell beverages, there are 1,925 of them which dispense directly from the bottle, while 6,705 use dispensers or vending machines of some nature.

Merchandise Handled

Considered of major importance in this section of the NATIONAL INDUSTRY CENSUS and, therefore, awarded a major share of investigation and study in the CENSUS "package", was the question dealing with the merchandise handled in all types and methods of confection vending in the nation's theatres. Here also it is possible to draw a direct contrast with similar totals as carried in the previous 1947 survey, and to chart the resultant trends. Under Table No. 17 will be found the results of tabulations approached from many different directions of analysis and cross-check. It shows that, if chewing gum is considered as a member of the candy family, the four major products which support the industry's tremendous confection vending effort are: popcorn, candy, beverages, and ice cream, in just that order of importance. While candy is actually sold in less smaller theatres than is popcorn, its popularity rises with the size of the theatre to the place where every cooperating theatre owner in theatres of more than 1000 seats makes it available as a patron service, in vending machines at least, even when a lobby stand does not exist. Popcorn is the dominant factor in the smaller theatre, but falls away in popularity as the theatres become larger, and no doubt, as the location and run dictate a higher quality of operation. Beverages and ice cream both require space or cabinets for storage which the smaller theatre often does not possess, and this is very probably the reason for the relatively minor showing of these two products in the smallest theatres, with constantly increasing popularity as the theatres grow larger.

In contrast to the 1947 survey, the following trends can be noted: In 1947, candy was sold by 84.4% of the "package" analyzed, as contrasted to 83% in the current "package"; popcorn was sold in 88.2%, as contrasted to a current 89.6%; beverages were sold in 19%, as contrasted to a current 46.4%; ice cream was a negligible 5.7%, as contrasted to a current 23.7%; chewing gum was then sold in 41.5%, as contrasted to a current 46.2%; and cigarettes were formerly sold in 10.1%, as contrasted to a current 17.7%.

Projecting the current percentages of the CENSUS "package" into whole theatres, the following conclusions can be drawn: 16,667 of the nation's theatres sell popcorn; 15,448 of the nation's theatres sell candy; 8,640 of the nation's theatres sell beverages; 8,603 of the nation's theatres sell chewing gum; 4,408 of the nation's theatres sell ice cream; and 3,292 of the nation's theatres sell cigarettes.

Sources of Supply

The sources of supply for this important volume of theatre confection vending are equally important. Tabulated under Table No. 18 are the individual findings by size classifications. From these findings, it can be observed that the cooperative group purchaser is a relatively minor source at this time, although it is large enough to total and may grow. The concessionaire as a supply source follows fairly closely the operation by concessionaires as tabulated in Table No. 14. And the jobber and wholesaler out in the areas occupied by the theatres, and equipped to serve them best, are the major keys.

Combined, these two outlets serve 77.8% of the nation's theatres, or 14,471, and, as will be indicated later, this jobber-wholesaler supply volume represents an eventual theatre annual retail sale of $175,170,434. The concessionaire and co-op represent an additional theatre annual retail sale of $49,984,366.

Table No. 18

Source from which Purchased:

	1 to 500 Seats	501 to 1000 Seats	1001 Seats and Over	Average
1. Jobber	28.7%	31.1%	15.8%	28.7%
2. Co-op	01.5%	04.1%	0.00%	02.3%
3. Wholesaler	53.7%*	44.6%*	26.3%*	49.1%*
4. Concessionaire	16.1%	20.3%	57.9%	20.0%
*Both Jobber and Wholesaler	02.5%	04.1%	0.00%	02.8%

Sales Prices

The price range of theatre sales is again interesting because it shows a tendency toward the sale of higher priced products and "the large economy size", rather than the 5¢ candy bar which dominated the days of the vending machine. This is another by-product of the lobby staff and the persuasive attendant, a factor which might very well open up some new thinking by theatre owners and manufacturers of supplies. Under today's conditions, and at today's admission scales, the motion picture theatre patron is not the penny pincher of yore looking for the cheapest source of entertainment; properly approached in the right type of theatre, he is a prospect for better confections and boxed merchandise, as well as for the 5¢ and 10¢ items. Tabulations of the theatre owner replies dealing with the price ranges of the merchandise they offer will be found under Table No. 19.

Volume of Sales

And now for some of the most important conclusions of all. Under Table No. 20 have been carefully tabulated the findings as to the number of items stocked by theatres of all size classifications; these products range from the one item of popcorn to the numerous items, where a full scale lobby shop or luncheonette activity was in existence. Here also will be found the results of owner's answers to the average number of sales per hundred patrons in all kinds, types, and sizes of theatres, together with the average income per sale.

With regard to the stock, it is reasonable to conclude that the larger the theatre, the more diversified will be the patron demand; but, of greatest importance, will be the amount of available space necessary to the displaying and merchandising of diversified products. The CENSUS "package" holds true to this conclusion, and owners can very well judge their own facilities by a contrast to these totals.

Volume of sale per hundred patrons followed no particular pattern, but seemed to settle into definite channels under each of the size classifications. The highest percentage in the intermediate class may indicate good lobby

Table No. 19

Price Range of Sales:	*1 to 500 Seats*	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
1. At 5 Cents	36.5%	40.0%	39.6%	37.7%
2. At 10 Cents	40.3%	38.6%	39.3%	39.9%
3. At 20 Cents	11.9%	11.8%	08.3%	11.6%
4. At 25 Cents and Up	11.3%	09.6%	12.8%	10.8%

stand facilities not enjoyed by the smaller theatres, and a compact audience that cannot avoid the implications of the stand, as is possible in the larger theatres. Good-sized theatres with a large percentage of family patronage may be another reason. But the industry national average of 56.6 sales per hundred patrons is a very believable total, as contrasted to 59.6 sales in the 1947 survey, and now representing a sales volume per week of 50,940,000, projected on the known 90,000,000 admissions per week to the nation's theatres. The average price per sale, increasing from 8.2¢ in the small theatre to about 9¢ in the large theatre, and showing a national average of 8.5¢ per sale, contrasts to the earlier 1947 finding of 7.9¢ per sale. Yet, here, once again, the CENSUS "package" proves itself through cross-checking with other questions. It has been shown earlier in Table No. 17 that the sale of popcorn, beverages, and ice cream is increasing, and all of these normally represent a 10¢ price. It has also been shown in Table No. 19 that there is a growing popularity in the products selling for 10¢ and higher. It is, therefore, very logical to believe that the average price per sale must, and does, increase.

By simple arithmetic it is possible to project these final figures into a very positive annual gross retail business through the nation's vending facilities.

Table No. 20

Volume of Sales:	*1 to 500 Seats*	*501 to 1000 Seats*	*1001 Seats and Over*	*Average*
1. Number of Items Stocked	20.6	39.9	53.1	29.0
2. Average Number of Sales for 100 Patrons	56.4	64.6	36.2	56.6
3. Average Price per Sale	.082¢	.091¢	.09¢	.085¢

Based on the presumed 90,000,000 motion picture theatre patrons weekly, as drawn from annual federal admission tax totals and other industry totals, 56.6 purchases per hundred patrons indicate a weekly total of 50,940,000 sales. Multiplying this total sales volume by the average sale price of 8.5¢ produces the staggering weekly total of $4,329,900. The 52-week year, therefore, should total $225,154,800; and while this is small in contrast to **Film Daily Year Book's** estimate that the U.S. film theatres' admission gross is 1948, exclusive of federal and state admission taxes, was $1,545,000,000, it still isn't hay!

CONCLUSION AND APPRECIATION

The thanks of these publications and all members of their staffs who participated in this first NATIONAL THEATRE CENSUS goes out to the many hundreds of theatre men who thoughtfully analyzed their facilities and experiences and had sufficient confidence in the integrity of the publishers to commit many rather confidential reports to their handling. Each of these owners has been promised, and will receive, a personal copy of the findings, from which he can contrast his own particular operation to the national average of the same size theatre. It is the publisher's hope that such firm yardsticks will be useful and helpful to the continuing advancement of the nation's theatres and of their annual gross income.

On such mutual confidence between owners and the trade papers which serve them, much future progress can be based. Gentlemen, our sincere thanks!



LOBBY SHOPS depend on the availability of large space and are usually designed to abut the lobby or street in such a manner as to cater to the non-admission paying passerby as well as to the theatre patron. Wherever tried they have usually shown a profit that is far greater than former rentals received from store space. Here at the Park, Tampa, Fla., the lobby shop includes a well equipped lunch bar.

Modern Theatre Requirements

A Condensed TOA Report* of Recommendations Demonstrated to Have Practical Application

By R. H. McCULLOUGH

* *Presented at the National Convention of the Theatre Owners of America, Inc., Los Angeles, September 12 to 15, 1949, by their Theatre Equipment and Accessories Committee.*

BRIEF: ***Since successful theatre operation involves a great deal more than four walls, a roof, seats, and a projector, careful studies have been made of all the ingredients which go into making a top-notch showplace . . . Such questions as the best types of lighting, displays, and other equipment to use are constantly arising . . . The care and common sense used in choosing them can spell success . . . or failure . . . at the boxoffice.***

In a worthy effort to dispel the mist and confusion . . . which often shrouds the multiplicity of problems arising in connection with the proper outfitting of the various parts of the theatre . . . and keeping it in first-class shape from a maintenance point of view . . . an experienced group of theatremen present their views on the subject in a neat capsule form . . . Their condensed treatment of complex topics should be welcomed by everyone contemplating a new or remodeling project . . . as a summary of the do's and don'ts of good theatre management.

With the competition today, particularly from drive-in theatres and other forms of amusement, our theatres have to be more comfortable, with improved ventilation, good seating, and with the finest projection and sound reproduction possible, including a courteous staff.

Structural Recommendations

1. **Marquees**—Marquees should be decorative and animated, with large attraction boards, with interchangeable letters of more than one size and colored for effective advertising. The angle type marquee offers better readability and visibility.

2. **Theatre Name**—It is the opinion of the committee that the theatre name should be incorporated above the attraction boards of marquees.

3. **Vertical Signs**—Where vertical signs are installed they should become a part of the marquee and also tie in with the facade of the building.

4. **Theatre Fronts**—Conventional theatre fronts should be simple in design. Use lighting in stressing architectural beauty. Ornate and elaborate fronts of buildings do not attract attention.

5. **Boxoffice**—There are many types of boxoffices, in all shapes, sizes and forms. The one adopted by many theatres on the West Coast includes sufficient space for a cashier and an auxiliary cashier, besides room for a boxoffice safe and the usual ticket machine; also in the front part a space for the coin changer, money drawers, etc. We find it is important that the boxoffice be thoroughly ventilated so that the cashier will be comfortable at all times.

6. **Display Frames**—Display frames should be well illuminated. Fluorescent lighting saves money. There are many types of display frames, but lighting is very important.

7. **Lobby Floors**—Lobby floors should be decorative. Materials used today are concrete, tile and terrazzo. Slippage on terrazzo floors can be overcome by installing fifty per cent abrasive carborundum to the mortar base at the time the floor installation is made.

8. **Doors**—Tuflex front glass doors or equal are recommended by the committee. Let the public see your foyer. Light locks can be constructed to prevent outside light from entering the auditorium. There are many types of doors with small metal frames which can be purchased to meet the exhibitor's pocket book.

9. **Single-Floor Seating**—Single-floor seating is favored instead of the balcony-type theatre for sound motion pictures. Stadium auditoriums are popular.

10. **Projection Room Layouts**—Projection room design for new theatres should be studied carefully. Remember, future television developments will require more space. Projection room layouts may be obtained from the Society of Motion Picture Engineers' office in New York.

11. **Acoustical Treatment**—Acoustical treatment is a necessity for auditoriums. Acoustical plaster or padded fabrics should be installed high enough above the wainscot to keep them out of the reach of the public.

12. **Copper Tubing**—Copper tubing is highly favored over steel piping for water lines. Remember, electrolysis plays an evil part in damaging steel pipe water line. Any underground piping is not favored.

13. **Paints**—Oil paints are overwhelmingly recommended. Use casein or water colors for acoustical surfaces.

14. **Indoor Lighting**—Indoor lighting should taper down progressively from the entrance doors to the front of the auditorium.

The following are foot candle readings which we would recommend for lighting:

Under Marquee—20 to 100 foot candles.
Outer lobby—10 to 75 foot candles.
Foyer—5 to 20 foot candles.
Lounges—5 to 15 foot candles.
Stairs—1 to 3 foot candles.
Auditorium lighting—0.1 to 5 foot candles.
Front of auditorium—0.1 to 2 foot candles.

15. **Air Conditioning**—No theatre should be built without some means of air cooling. Air conditioning need not always include a complete refrigeration job, but simpler and less expensive methods, such as water evaporative coolers, or even the mere moving of large quantities of air may suffice.

16. **Insulation**—Insulate your roof and ceilings to reduce cooling and heating loss and cost.

Theatre Equipment and Accessories Committee, TOA

R. N. McCULLOUGH, Chairman
General Purchasing Agent in Charge of Construction and Maintenance, Fox West Coast Agency Corporation, and National Theatres Amusement Company, Los Angeles.

J. M. SUTTON
Exhibitor and partner in the Hawaii, Hollywood, Calif.

B. F. SHEARER
Equipment dealer with stores in Los Angeles, San Francisco, and Seattle; also a theatre owner.

J. C. CHATMAS
Exhibitor, operating the Palace, Marlin, Texas.

WALLACE BLAKENSHIP
President, Blakenship Theatres, Dallas, operating theatres in various parts of Texas.

FRANK VALUSKIS
Exhibitor, operating the Buena, Buena Park, Calif.

EVERT CUMMINGS
Exhibitor, operating theatres in Downey, Norwalk, and Ridge Crest, Calif.

J. W. BANTEAU
Chief Mechanical Engineer, Fox West Coast Theatres, Los Angeles.

Equipment Suggestions

With reference to equipment, we will start with the boxoffice and go through the theatre briefly:

1. **Boxoffice**—Very little improvement has been made to ticket machines, coin changers and other boxoffice equipment, with the exception of the boxoffice safe. Many theatres use a safe which is installed at the side of the boxoffice, with two compartments. Two keys are required to open the inner compartment. As the cashier takes in the money it is checked into the second compartment, and the total amount of the receipts is kept on hand during the daily operation. This type of safe reduces insurance and discourages hold-ups.

Boxoffice equipment such as price signs, boxoffice chair and drapes mean a great deal to a theatre. If the boxoffice is untidy, it means that the rest of the theatre is sloppy.

2. **Carpet**—There are eight carpet mills in the United States manufacturing theatre patterned carpets. One of these firms recently came out with a rubber backing on their carpet, which eliminates the purchase of carpet padding. Remember, the labor for laying carpet has tripled in cost. It is a good investment to purchase a good quality of carpet because, due to the increase in freight rates and wage rates, it costs just as much to lay a cheap grade of carpet as a good carpet.

3. **Furniture**—Fireproof fabrics are important when selecting furniture.

4. **Stage and House Drapes**—All stage and house drapes must be fireproofed. When ordering new curtains your drapery company can supply you with fireproof materials. Fireproofing drapes when in place is expensive and impratical.

5. **Aisle Doors**—Aisle doors should be used wherever possible to eliminate drapes. Aisle drapes collect moisture, dirt, and are expensive in maintenance and upkeep.

6. **Refrigeration**—There are several companies manufacturing refrigeration equipment. We recommend the use of Freon machines in multiple units.

7. **Projected Picture Size**—The postage-size projected picture days are gone. Drive-in theatre operation has compelled many theatres to increase the size of the projected picture. As you know, drive-in theatre picture sizes vary from 25 to 50 feet in width. Your picture size must be sufficiently large for comfortable viewing. The viewing comfort of the patron must not be compromised with economy.

8. **Screen**—Is your screen clean? Perhaps resurfacing or replacement is necessary. Projected pictures must be brilliant, rock steady, with good definition. Is your projected picture being presented properly? Remember, lighting effects play an important part on opening titles and endings.

9. **Close-In Curtains**—Close-in curtains help to dress up the performance at the end of subjects.

10. **Effect Machines**—We highly recommend that theatres resume using effect machines and other equipment which has been lying idle in theatres for a number of years.

11. **New Equipment**—Remember, projector mechanisms will last for years if they are well serviced and maintained. Projection equipment can be purchased today to fit the exhibitor's pocket book. The projector manufacturing business is somewhat like the automobile business. They start with a Ford and end up in Cadillac fashion.

12. **Projector Arcs**—The Suprex arc lamp during the past ten years has been quite successful. The present Suprex arc lamp is rated for 65 amperes. The development of the water cooling device for the positive carbon holder enables the projectionist to increase the amperage and to obtain more illumination with less heat. This new development permits the use of 80 amperes with the Suprex lamp, thus increasing the projected picture illumination.

13. **D.C. Power for Projector Arcs**—It has been customary to use generators for converting a.c current into d.c current for projector arcs.

Many types of rectifiers have been manufactured which require a small amount of amperage from the primary source. The secondary source provides 65 amperes with very little factor loss.

In many theatres throughout the United States the manager and the projectionist are not aware that rectifier stacks can deteriorate. Remember, if the improper voltage is used with reference to the Suprex arc, loss of illumination will result.

14. **Sound Equipment**—When purchasing sound equipment the exhibitor should familiarize himself with the output of power which will be supplied with the new installation. Many scenes in pictures today require increased power wattage.

Distortion in sound reproduction will ruin many effects, and a little more money spent in the additional output of power will be well invested. The principle of sound reproduction is the same throughout, and it is the matter of specifications which governs the price.

15. **Projector Lenses**—There are many types of projector lenses. We highly recommend that exhibitors do not purchase cheap lenses. By all means coated lenses will increase screen illumination.

16. **Seats**—There are several types of opera chairs manufactured in the United States and foreign countries. Very little improvement has been made within the past ten years with the exception of the push-back feature.

If space permits, it is highly recommended that opera chairs be spaced 36 inches back to back, and loges of the upholstered type be spaced 38 inches back to back. No opera chairs should be installed less than twenty inches in width. Remember, patrons must have comfort.

In hot climates we believe leatherette upholstering is more economical and more sanitary. In cool climates we believe the mohair fabrics provide more comfort.

17. **General Touching Up**—It is highly important that we create improvements to call to the attention of our customers that we are doing everything possible to make them comfortable. Brighten your theatre front. Paint, clean up, dress up your theatre. Give the theatre-going patron a good show.

MODERN THEATRES TODAY are without a doubt the safest, most comfortable and best equipped of all places of public assemblage. Most theatres go far beyond the minimum requirements in a very frank effort to impress their patronage with the fact that their facilities have no equal regardless of entertainment. Here illustrated is the inner lobby of the new Odeon Humber, Toronto, Canada.



Factors in Modern Theatre Appraisal*

A Brief Survey of the Elements Which Determine a Value for Purchase, Investment, or Mortgage Aims

By J. Solis-Cohen, Jr., M.A.I.

BRIEF: *Once upon a time . . . in the days when silent pictures were still being shown . . . the value of a theatre . . . for real estate purposes . . . was determined to a large extent on the income yielded by the other commercial enterprises incorporated with it . . . and on the financial strength of the management organization . . . Due to its relative novelty, the theatre of yesteryear did not have to provide the acme in physical comforts for patrons, nor sell confections in its lobby as a source of extra revenue . . . There was comparatively little competition . . . so even poor pictures would attract crowds . . . Lastly, there were few automobiles then to create parking problems.*

The days of freedom from such worries have, however, faded into industry history . . . The moviegoing public now insists on good facilities, reasonably decent pictures . . . and plenty of parking space for their cars . . . The degree to which a particular theatre succeeds in providing these requisites determines the receipts it takes in at the boxoffice . . . and also its intrinsic value from an appraisal point of view.

Thus a theatre's worth in dollars and cents is determined . . . by a prospective purchaser, investor, or mortgagee . . . on the basis of many factors other than the cost of the land and building themselves . . . Quality of product shown, location, operational expenses, etc., also play an important role in the assessment of a modern motion picture house.

A few of the yardsticks . . . by which today's appraiser measures the true value of a theatre . . . are outlined below . . . They should also serve as good suggestions of ways in which builders and operators can put better price tags on their showplaces.

After 35 years of experience in buying, selling, leasing, building, financing, and appraising motion picture theatres, there is, in my opinion, no strict formula that can be used to establish market value.

The writer was fortunate to be associated with the late Jules and Stanley Mastbaum from the time theatres were being purchased, leased, and built in the organization and development of the Stanley Company of America. My work under the direction of the Mastbaums was not confined to the Philadelphia metropolitan area, but in various key cities of Pennsylvania, New York, New Jersey, Delaware, and the City of Washington, so my opinions have been formulated by a personal realistic and practical approach to the problem.

This was before the days of Sunday movies, when the silent picture was being shown, when air conditioning in theatres was not a must, parking problems not so great, and popcorn, candy and soft drinks not for sale in the lobby.

The lenders of mortgage money for theatres were particularly interested in the income from the "commercial" section of the buildings and how strong a company was on the lease. Such theatre buildings as the Stanley on the Boardwalk in Atlantic City, N. J., the Earle at 11th and Market Streets, Philadelphia, were more easily financed than the suburban theatre dependent solely on boxoffice receipts for its net income.

Current General Considerations

Today, in valuing a motion picture theatre for purchase, investment or mortgage purposes, an appraiser should be primarily interested in the following factors: availability of product and clearance, price of admission, off-street parking facilities, competition in area, is theatre open six or seven days, physical condition of building, income from commercial rentals, finally, income from sale of popcorn, candy, and soft drinks.

Of course, the replacement value of building and equipment and comparative value of ground would definitely enter into the calculations, but comfortableness of seats and air conditioning would also be given consideration.

New Theatre Problems

A theatre building without seats and booth equipment is usually a bad risk for a lender, for without equipment it cannot produce income. In considering a loan on a new theatre where it is impossible to have a backlog of past performance to consider, estimated income must be carefully analyzed. Is there product available for another theatre in this area? Is the section overseated? Is the seating capacity of the theatre sufficient to enable the operator to successfully bid for big pictures for first runs in the area? These are all factors which, as an appraiser, I personally consider in valuing a theatre.

Operator's Financial Standing

The question of the stability of the operator is not always determined by his rating or bank balance. Frequently a theatre run by a small operator is more successful and a better risk than a comparable house with a local manager and absentee management. The little fellow may have a neighborhood following, be a better theatre housekeeper, a good buyer of product, have wider aisles in his theatre, excellent off-the-street parking facilities, and incidentally, able to sell much more popcorn than his competitor.

When a financial institution or insurance company receives a mortgage application from the small operator, it should not be declined without a careful investigation.

Size and Receipts

Another fallacy in valuing motion picture theatres is that a 750-seat house is usually worth one-half of a 1,500-seat house. This is not always true. Pictures today are rented, as a rule, on a percentage of the receipts rather than for a flat sum. The average percentage is about 35%, but for an unusual picture it may run as high as 70%, and for an inferior picture as low as 20%.

It is not hard to figure that a film exchange having an outstanding picture to sell would prefer to have it booked in the house with the larger seating capacity, and, as a consequence, the income of the 1,500-seat house over a period may be three times, instead of only twice, the income of the 750-seat house.

On the other hand, there are many locations, particularly in the suburbs, where the 1,800 to 2,500-seat houses built in the nineteen twenties cannot make any money because of too many seats, the higher cost of buildings with greater carrying charges, and the theatres with less seating capacity in the same area are more profitable.

Some theatres located in second-class neighborhoods, with infiltration of mixed elements, are often better money-makers than a more modern up-to-date theatre located in a high-grade suburban area. A mortgage lender is particularly interested in the steady earning power of the theatre so it can steadily reduce its mortgage indebtedness, rather than in whether the patrons wear sport shirts and slacks.

Determination of True Value

Assuming that a real estate appraiser of many years' experience determines that the value of the land on which the theatre is erected is $100,000, he also has a sound knowledge of construction costs and correctly concludes that the reproduction cost of the theatre building is $200,000, making a total value by the summation method of $300,000. But has he arrived at the value of the theatre? The answer is not necessarily, and probably no.

The value of brick, mortar, equipment and land does not always add up to the value of a going theatre, or potential value if about to be built. While it is true that with competition around the corner, a modern physical structure with the latest in improvements is necessary to attract and retain patronage, customers will be attracted only by pictures and the time when the pictures are shown. To get sufficient gross receipts,

** A paper delivered October 1, 1949, before the State Convention of the Pennsylvania Realtors Association at Reading, Pa. It amplified an original presentation to the Philadelphia Mortgage Bankers Association at Philadelphia, Pa., on September 12, 1949.*

out of which all operating expenses must be paid before anything is left for servicing the investment, the operator must have good pictures. The important question, therefore, is what is the product situation:

(a) Does the house have an exceptional run of a product resulting from a unique buying power or monopolistic position of the management?

(b) Does the house have an artificially inferior run and supply of product because of the fact that its management is not experienced or lacks the ability to select the best pictures?

(c) Does the theatre enjoy a run of product which is "right" for the house; a run of product whereby, under a free and untrammeled market and competitive conditions, it could attract enough patrons at the admission prices to return a rental to the film companies as would a competitor equally situated?

Obviously, the true value of the theatre must be based upon the realistic factors of location and grossing possibilities without regard to advantages, if any, given by theatre circuit buying power.

Distribution Factors

As a result of a considerable amount of litigation in the industry by the Government (United States vs. Paramount), as well as private law suits based upon conspiracy and restraint of trade, decrees have been and are being formulated which are designed to open up the market to any exhibitor, to the end that an exhibitor will be placed on a parity with his competitor. Thus, decrees requiring divorcement of production and exhibition interests have been entered (United States vs. Paramount, Fox, Warners, RKO, Loew's). Decrees requiring the distribution to deal fairly with independents have been entered in the Goldman, Jackson-Park, and Ball cases. Assuming that the letter and spirit of the decrees will be observed, the value of motion pictures, in a sense, will be stabilized because a theatre in the hands of an independent exhibitor will be able to get pictures on a competitive basis.

On the other hand, the theatre operator who has a favorable run of product will no longer be able to sit by complacently and feel secure in the knowledge that he will be able to keep that product away from any new competitor.

The Overall Theatre Potential

The appraiser and mortgage lender must take into consideration the volume of business that can be attracted by the theatre, considering the population, the draw, and the ability of the patronage to pay a fair admission price. The next consideration is whether the amount remaining after deducting from the gross income the cost of film and the operation expenses will be sufficient to net a fair return to the theatre owner, and, in the case of a mortgagee, enough to not only pay sizeable amortization plus interest, but leave a sufficient cushion for the vagaries in the attendance at motion picture theatres.

It is equally important to determine: how many people visit or stop in the territory immediately adjacent to the theatre (what is the theatre's draw); is the territory overseated, or are there too many theatres in the locality; and of the probability of another theatre being built in the immediate neighborhood.

As a rule, rent, or the occupancy charge, is calculated at about 15% of the gross receipts, although some operators can pay as high as 20% and others only 12%, depending largely upon the average cost of the pictures shown.

The Influence of Television and Drive-Ins on Attendance

There has been considerable discussion about the effect television may have on motion picture theatre attendance; whether present admission prices might have to be reduced and of the effect of drive-in-theatres.

The writer is of the opinion that: (1) television will not, after the novelty has worn off, materially affect motion picture attendance "if," and it's a big "if," the theatres show good pictures; (2) that admissions are at present too high because of the admission taxes and probably will be reduced or removed by 1950-51; (3) that drive-in movies in many localities cannot be readily financed. While it may cost from $150,000 to $250,000 to build and equip a drive-in movie, it has specialized equipment hardly to be considered as salable collateral. During the hot summer days of 1949, many drive-in movies in the State of Pennsylvania had a few weeks of capacity business. Colder and rainier weather and the return of sitters from vacations and camps later cut down attendance.

A successful operator of a small chain of theatres in Pennsylvania recently told the writer that when a drive-in closes, business in the conventional theatre gets better, which seems to indicate that the drive-in theatres are helping to create more business for the industry.

In the cooler areas of the United States the out-door season runs about thirty weeks. On the west coast and in the south it is on an all-year-round basis. In Chicago there are two drive-ins built as a twin, one screen being used for both. It cost almost $700,000 to build and accommodates 1,800—cars. The same picture is shown in both drive-ins nightly. They are bidding for first runs and are reported to be doing "big business."

The Wall Street Journal, in a feature article on September 16, 1949, indicates that there has been an increase in attendance, after a disturbing 15% to 20% drop last spring, over the figure of a year ago. Better pictures are said to be the principal reason.

Boxoffice Breakdown

Reports from successful theatre operators have brought out the importance to the boxoffice of Sunday movies, for, of the total weekly receipts, from 55% to 60% is usually taken in Friday, Saturday and Sunday. For example, in a theatre grossing $4,000 a week, the breakdown usually will be $1,000 on Saturday, $1,000 on Sunday—matinee business not so good in the summer—and $400 on Friday. On the other days the receipts will probably be lowest on Monday, increasing on Thursday, Tuesday, and Wednesday in the order named. Some progressive exhibitors change the program Thursday in an effort to increase the gross, and, if the pictures are changed twice weekly, they use Mondays for the other change.

Conclusion

The appraisal of motion picture theatres is an interesting angle of our business, and, with the large film companies compelled to divest themselves of a certain number of theatres each year for the next three years under the "Consent Decree," there should be considerable work for professional appraisers who have developed a realistic and a not too theoretical approach to the present day valuation of motion picture theatres.

ABOUT THE AUTHOR

J. Solis-Cohen, Jr., has been active in the real estate field in Philadelphia for over 37 years. During this period he has bought, sold, built, and appraised motion picture theatres, and is recognized as an authority on their value. Due to his early association with the late Jules E. Mastbaum, one of the organizers of the old Stanley Company of America, he has played an important part in assembling the sites and erecting many of the present downtown and suburban theatres in the Philadelphia area.

Qualified as a real estate expert in the Common Pleas and Orphans' Courts of Philadelphia, and United States District Courts of both Eastern Pennsylvania and Southern New York, Solis-Cohen is also a member of many real estate organizations including: the American Institute of Real Estate Appraisers, Society of Residential Appraisers (senior member), Pennsylvania Real Estate Association, National Association of Assessing Officers, Philadelphia Real Estate Board (Executive Appraisal Committee).

EDITOR'S NOTE: *Theatremen or financial interests who have found the foregoing survey of interest are referred to two other paralleling surveys relative to the financial side of the theatre industry and published in the earlier 1948-49 (Seventh Annual) Edition. These additional surveys are:* "COSTS CONSISTENT WITH GOOD MANAGEMENT" *on pages 500, 501, 502; and* "CURRENTLY ALLOWED DEPRECIATION SCHEDULES" *on pages 503, 504 and 505 of the former.*

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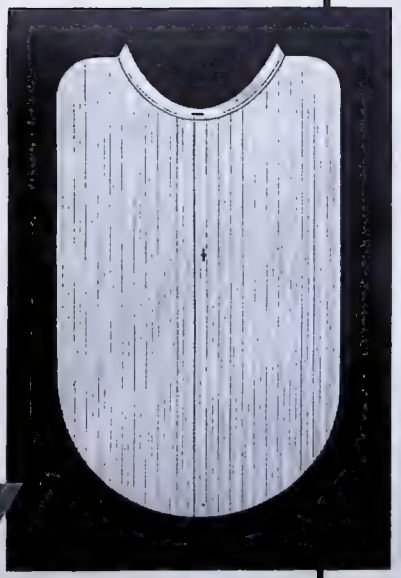




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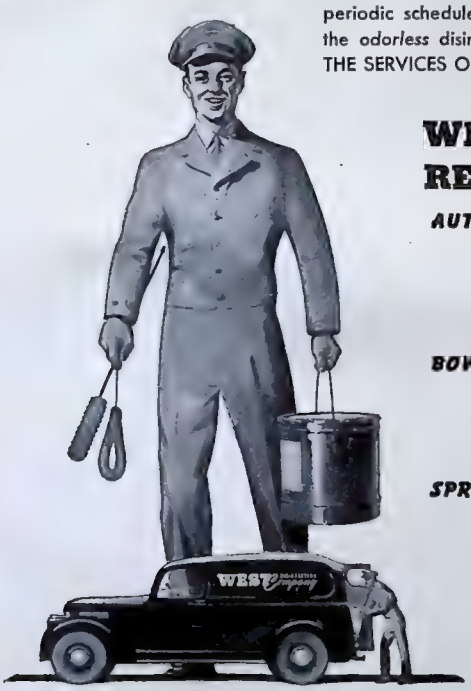
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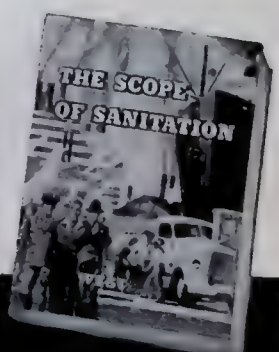
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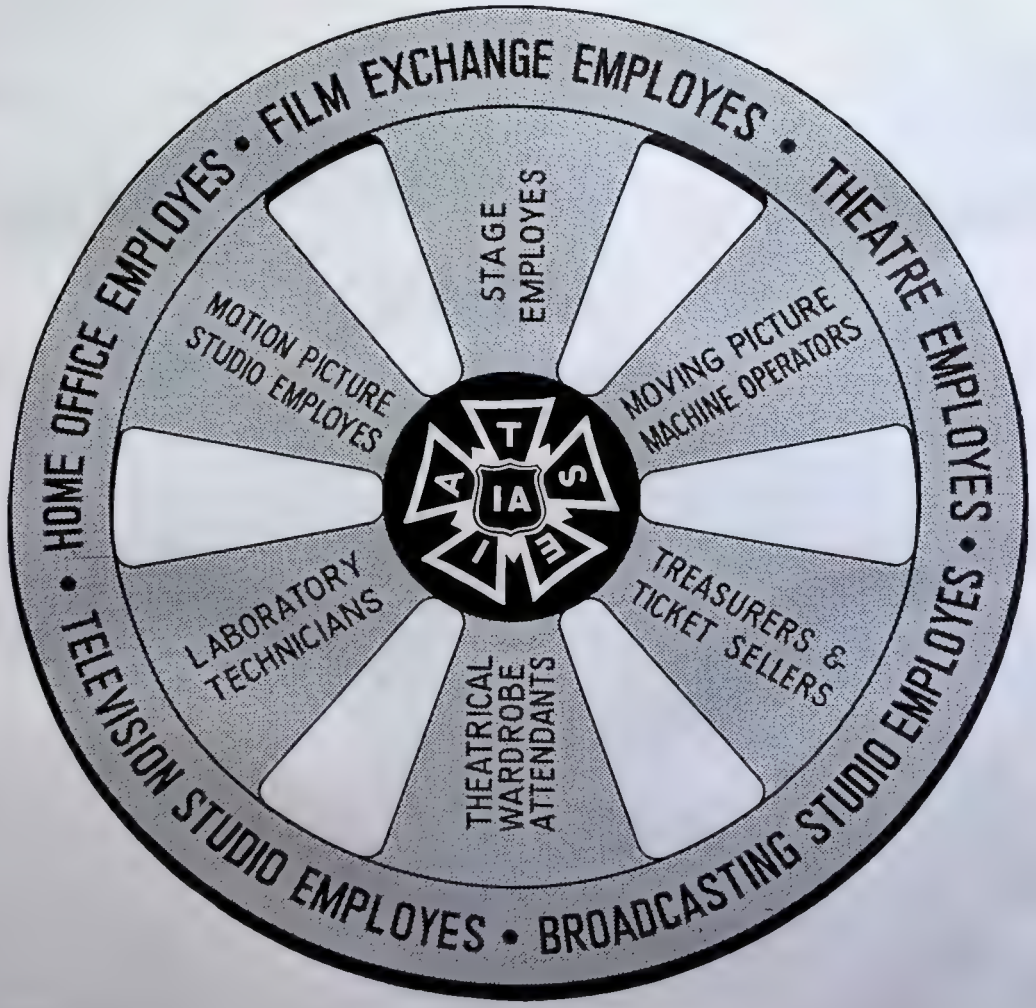
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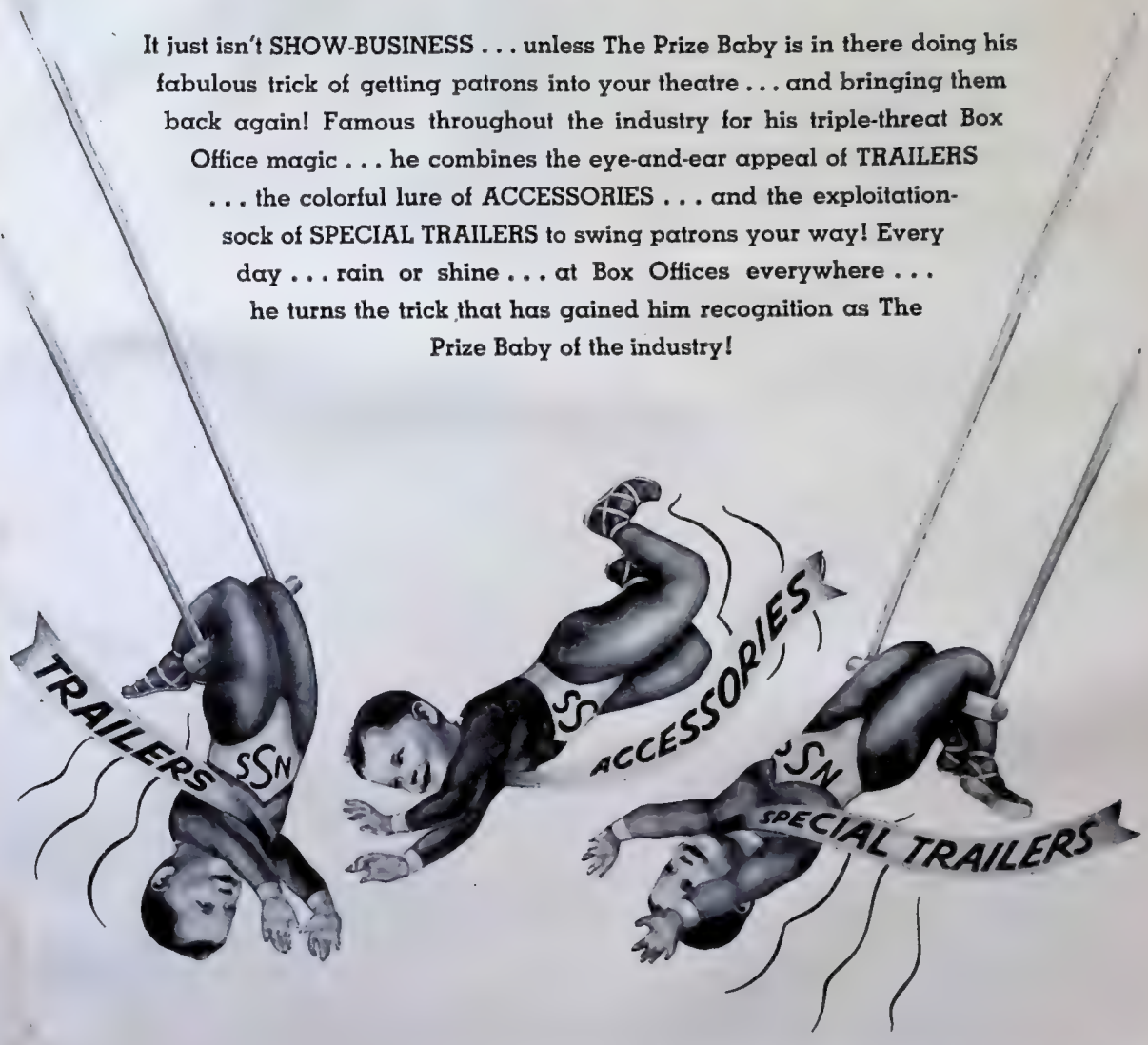
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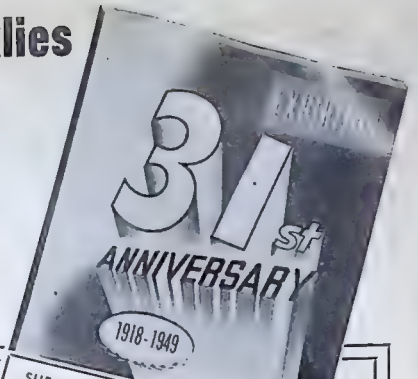


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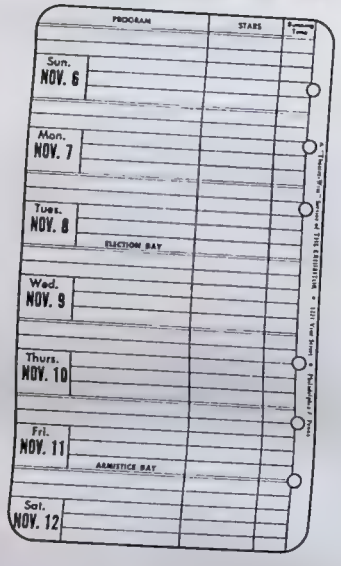
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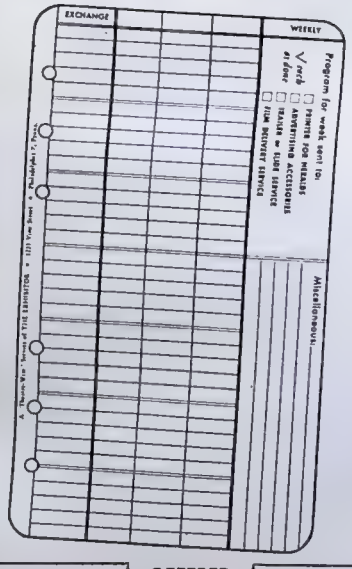


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EXTRA PROFITS

1949-50

How to Get Those Sweet Earnings

A Number of Helpful Suggestions on the Planning And Operation of a Successful Confection Stand

BRIEF: *The confection stand in the modern theatre is no longer an insignificant appendage . . . tucked away in some obscure corner . . . It now has a full-fledged importance all its own . . . particularly in these trying times when the added revenue from its sales must be counted upon to plug holes in balance sheets . . . caused by falling boxoffice receipts and higher operating expenses.*

Although it has become a component part of theatre operation . . . and must be handled as such . . . the confection stand does, nonetheless, present certain problems peculiarly its own . . . It is for this reason that many theatre circuits have set up separate confection departments . . . to insure the most efficient operation possible of this vital new segment of the industry.

Every theatreman, however . . . be he circuit executive or individual house manager . . . should know and understand the basic fundamentals of good confection stand operation . . . The following article . . . written by an expert in the field . . . sets forth the elementary principles of sound confection stand design, merchandising, display, etc. . . . The practical "do's" and "don'ts" contained therein should aid theatre operators in making their extra profits departments produce all that they should.

By J. J. Fitzgibbons, Jr.
Theatre Confections, Ltd., Toronto, Canada

Increased operating expenses and higher costs of film have caused theatre owners and executives to sharpen their pencils and look around for extra income.

More attention is now being given to income received from pay telephones, weighing scales, soft drink vendors, shoe shine machines, and the Number One "Eldorado"—Popcorn and Candy. And rightfully so, as this additional income has become big business, and thus is important enough not to be passed up.

Confection Selling No Novelty

Actually, the merchandising of confections in places of amusement is not new. It can be traced back as far as the Greeks and Romans, who satisfied their appetites while being amused in the great arenas. It was still a good business during the days of Shakespeare at the Globe Theatre when oranges and sweet meats were brought in between acts to the local nobles. The motion picture exhibitor gave it a new twist when he applied the same selling technique to candy that he used on pictures, "and presto" — something that had always been part of the entertainment business, but treated like an orphan, was all of a sudden greeted like a long lost brother.

More Theatre Recognition

The last few years have seen great improvements in the handling of confections in theatres. As the result of being recognized as a specialized business, a number of the large circuits have organized separate confection departments as part of theatre operation.

At one time, we made it hard for the patron to get what he wanted. Managers discouraged the sale of confections, and one theatre chain went so far as to ban its paying public from bringing confections into their theatres. But now by progressing with the times and using new methods, it is graciously called a service to the patron.

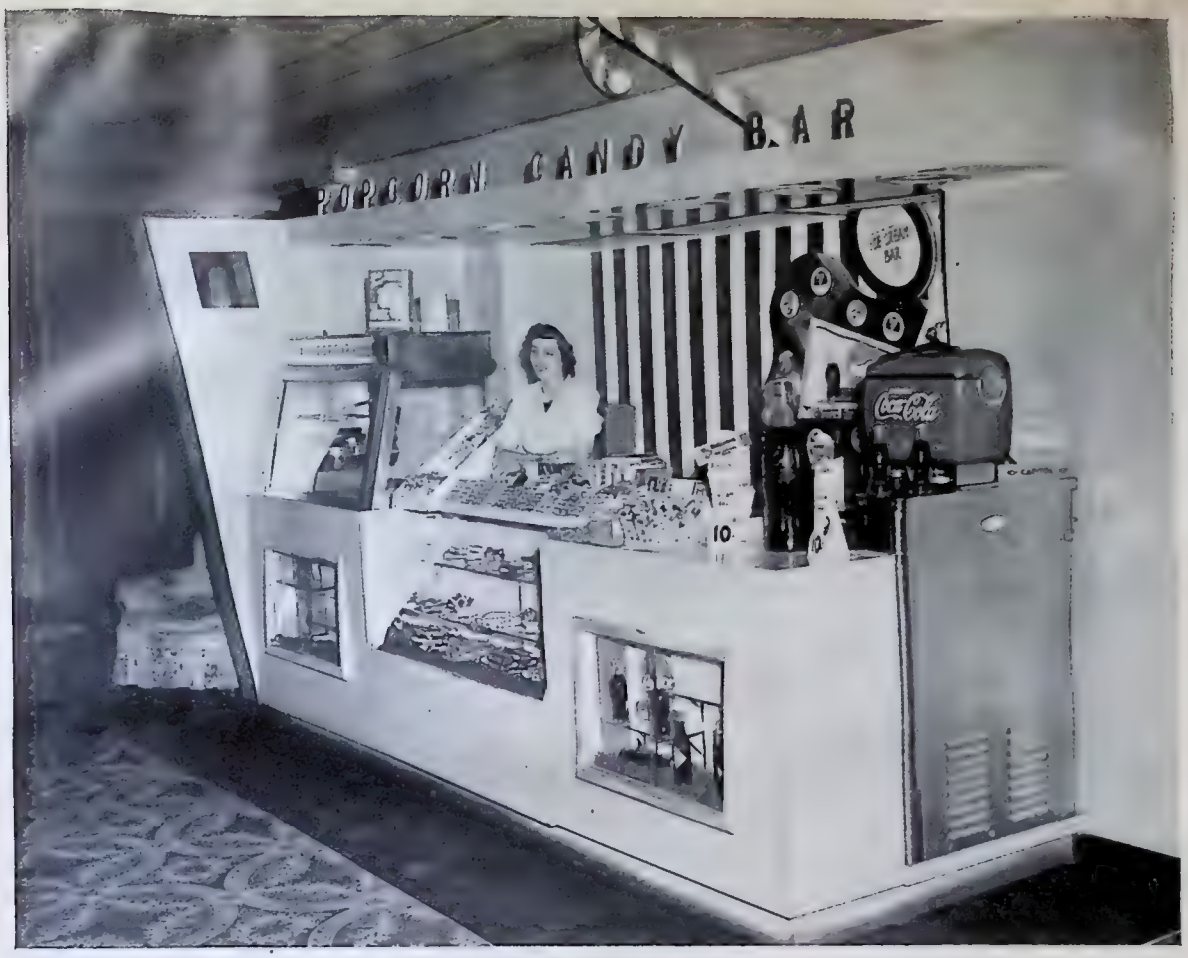
General Considerations

The requirements for a good confection operation are numerous. Basically, they can be broken down as follows:

1) Location of the installation.
2) The best merchandise at the right price.

A LARGE ALL-PURPOSE LOBBY STAND is strategically situated next the traffic flow in the Nortown, Toronto, Canada. Candy, popcorn, ice cream and soft drinks receive their proper share of display.





3) Neat and courteous attendants.
4) Clean counters and equipment.

The amount of traffic and the type of patrons can almost predetermine

1) The gross
2) What items can be sold—such as candy, popcorn, ice cream, soft drinks, cigarettes.
3) The cost of the installation and estimated operating expense.

Location

Normally, the best location for a candy counter is past the doorman, in line with the flow of traffic. Sometimes because of the lobby and foyer lay-out, it is impossible to obtain the ideal location. When this situation exists, it will pay dividends to use portable equipment, and test different locations. By using this method, you not only get an idea of the potential gross, but you can also budget the expenditure on construction of the installation.

There are theatres that have removed anywhere from eight to 20 seats to get the desired location. Before seats are removed, the pros and cons should be thoroughly looked into. You should determine the value of these seats as to whether or not the additional income from the candy bar will more than compensate for the return per seat.

SECTIONAL CONSTRUCTION FACILITATES CHANGES in capacity or decoration at a minimum of expense. Here at the Capitol, Chatham, Ontario, the extremely modern candy, popcorn and ice cream bar did not provide necessary space for profitable soft drinks. Because of its sectional nature it was easy to remove an end section and adjust a drink dispensing unit into the resulting space.





PRETESTING locations with a portable stand, resulted in this installation in the Runnemede, Toronto, Canada. Eight seats were removed to accommodate it and with no change in theatre policy the gross sales increased 66%.

Front Selling Counters

A suggestion for theatres short on space is the installation of a self-contained front selling counter. Although the number of items that can be handled is limited, excellent results have been obtained in a number of locations where, initially, it appeared to be almost physically impossible to place a counter in operation.

Front sellers are meeting with a degree of success as a supplement to the main counter, particularly when located on mezzanines or side entrances of larger theatres, and only placed in operation when the situation warrants.

Map Plans Carefully

Theatre architects and designers are now making provisions in their plans for confection layouts. Some are beautifully designed, and look fine in the planning stage, but a close check on details will reveal a number of common faults, such as, inaccessible, or no cash drawers at all, insufficient storage space, no stock rooms, and lighting that will burn the wrappers right off the candy bars. Unnecessary expense, after the theatre has been built, can be avoided by making the proposed plans available to theatre managers, attendants and personnel familiar with the small problems and details concerned. Sometimes their suggestions pay dividends.

Portable, self-contained, sectionalized counters are the most economical in the long run. The main reason is that new equipment can be added at a reasonable construction cost, in addition to the fact that their utility or resale value is high.

When at first, emphasis was placed on candy and popcorn, the designers went mad. Elaborate and costly installations were made. Then soft drinks and ice cream became popular. The result in some situations was the complete scrapping of the installation. On the other hand, little difficulty and small expense was involved when soft drink or ice cream units were installed in counters that were well planned and designed for future contingencies.

Sell Good Merchandise

"Name" brands are the only kind of merchandise and equipment to handle. This applies to candy, ice cream, soft drink syrups, and in popcorn to the ingredients used, as well as the quality of the raw corn. Some buyers at one time or another have let themselves in for a great deal of grief, on so-called "bargains," in candy, equipment and particularly popcorn.

SECTIONAL UNITS facilitated the expansion of this stand in the Capitol, London, Ontario, and the addition of ice cream and soft drinks. Located in the direct line of traffic flow, two new units were added to the center.





Candy Displays

There are two schools of thought with regard to displaying candy. One, everything is under glass; the other, everything placed on top of the counter within reach of the patron. Both have their advantages. A covered display prevents loss by theft. It has been our experience, however, that an open mass display creates more sales and that the patrons receive quicker service. There is the possibility of loss by pilferage, but increased sales will more than compensate.

Personnel Important

Neat and courteous attendants, who are well trained and supervised, serving the very best, from a counter located in the line of traffic, will guarantee the highest return possible. Wages play a very important part in obtaining the type of personnel who have the ability to get results.

Using Intermissions for Sales

Various theatres have been able to increase their confection business by using intermissions, particularly on week-ends.

At present, there are trailers available which effectively convey the idea to the patron that there will be an intermission for their convenience.

The use of an intermission depends upon local circumstances and situations. A theatre manager is in a position to decide whether or not he can use an intermission profitably. Sometimes schedules are so tight that he might run into overtime, the costs cutting into the extra income that would be made at his candy

Easing the Manager's Burden

As selling entertainment is the grass roots of this business, the trend is to give as much relief as possible to the theatre managers on details such as candy reports, ordering, supervision of personnel and merchandising, so that he can spend more time selling his product and operating his house. He is still responsible for the candy operation, but at least, efforts are being made to give him assistance through circuit Candy Departments. In situations where concessioners are operating, they are being asked to shape up and get on the band wagon, or they will be watching the parade instead of being in it.

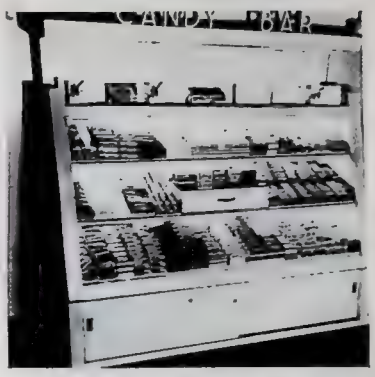
Theatre owners and executives have begun to realize that no matter how good a theatre manager might be, without some type of assistance, he can only do one job properly.

A Rosy Future

Production figures of the larger candy manufacturers show that they are producing more candy than ever before. We know that theatres have been helpful to some extent, not only from the amount consumed in theatres, but the fact is that retailers picked up a cue, and by modernizing, cleaning and dressing up their counters, increased their sales.

Consumer research reports show that candy is rated exceptionally high as an impulse item. This would indicate that presentation is the keynote of sales.





20 SEATS WERE REMOVED to accommodate a sectionalized modern counter handling candy, ice cream and soft drinks at the Capitol, Winnipeg, Canada (below). Good taste in design and display and the use of modern materials and fabrics feature most of these Canadian efforts. Portable "front sellers" (above) with ample cash drawers are recommended for testing locations and for side entrance and mezzanine sales. The one at top is four feet wide and the other is six feet wide.



An Attendant's Simple Uniform

An Efficient Apron, Made in a Jiffy, Dresses Up Concession Stand Personnel at Moderate Expense



REAR VIEW showing ties. Loops can be added.

BRIEF: *Every theatreman knows that all his personnel . . . including those at the confection stand . . . must be neatly dressed and groomed to make a good appearance . . . Extra profits department attendants, however, have often been bypassed when it comes to ordering uniforms because of the added expense involved . . . in spite of the fact that patrons have just as much . . . if not more . . . contact with them than they do with other members of the staff.*

The following article describes a uniform for confection stand attendants which may be "homemade" at little cost . . . Attractive, yet practical, it lends an air of neat chicness to the wearer . . . that helps to ring up more sales on the cash register. And it is easy to launder and keep spotless.

A theatre whose personnel are attired in neat and well-tailored uniforms has an air of efficiency about it that pays off at the boxoffice. When the cashier, doorman, and ushers reflect style and smartness in their garb, the patron instinctively feels that he is attending a well-managed house, where flawless operation and scrupulous service constitute the order of the day.

Although confection stand sales have come to play a dominant role in the theatre profit picture, too little thought has been given to outfitting stand attendants also in uniforms that would impress patrons and thereby boost sales. The primary reason for management's reluctance to attire confection stand attendants in similar garb has been a financial one. Uniforms in general are costly items, and many theatres have felt that they could not afford to purchase them for confection stand as well as other personnel.

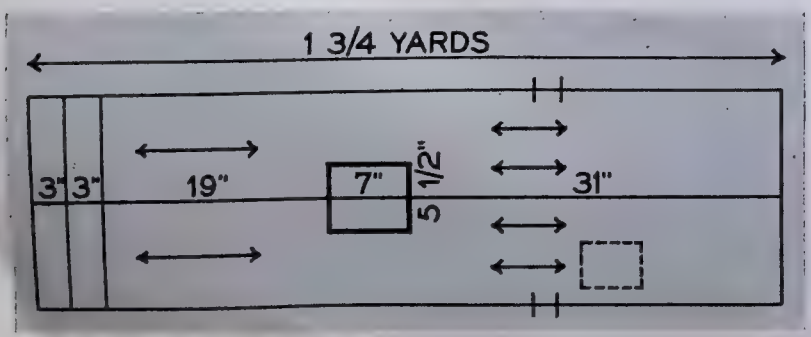
An Answer to the Problem

The fact remains, however, that attendants in attractive costumes do help sales in the extra profits department. With this axiom in mind, the Tri-States Theatre Corporation has designed a simple uniform for its confection stand personnel which is both eye-catching and inexpensive. This outfit, which takes the form of an apron, is easy to make, launder, and iron. Towelling material, which is attractive and colorful is ideal for this purpose, but any other suitable type may be used if desired.



FRONT VIEW is neat and orderly. Note pocket.

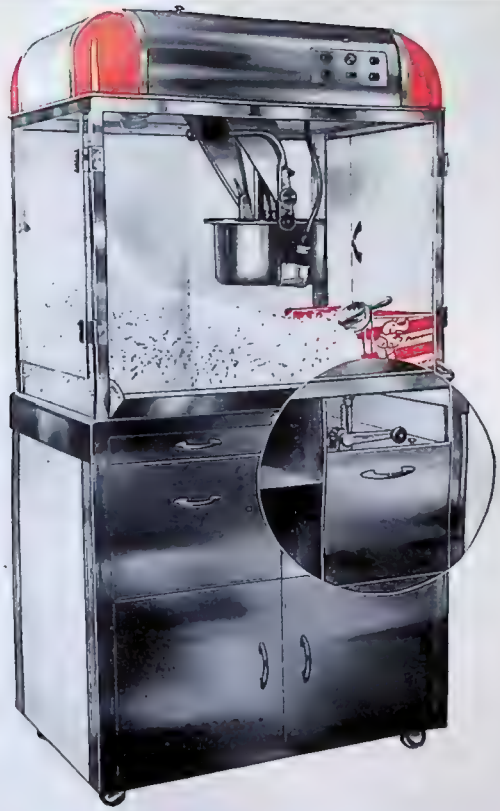
THE PATTERN can be applied to any washable material that is 18 or 20 inches wide and 45 inches long.



Sewing directions for the uniform, which requires one and three-quarter yards of 18 or 20-inch material, are very simple. First, two three-inch strips are cut from one end to make the ties for the apron. A one-inch hem is then put in each end of the large remaining piece. Next, a square five and one-half inches wide and seven inches long is cut out for the neck opening. This is finished with bias tape. The square that has been cut out is hemmed and used for a pocket. The next step is to make two nine-inch darts in the back of the apron, and four four-inch darts in the front, at the waistline. Finally, the ties are finished and attached to the front of the apron at the waistline.

The end result is a uniform that is attractive and functional at the same time. While adding a distinctive touch of dressiness, it allows the wearer perfect freedom of movement. It is an ideal solution to the problem of the manager who wants to outfit his confection stand attendants nicely but who does not want to go to the expense of purchasing formal uniforms, tailored to the measure of often-temporary personnel.

ONLY *Manley* BUILDS THE ARISTOCRAT OF POPCORN MACHINES



It's the Aristocrat because it's the leader! Watch its big-popping kettle — you can't match it anywhere for profit production. See its automatic seasoning system which eliminates guess work. It meters seasoning to the kettle — exactly the right amount for best taste — no waste, maximum profits.

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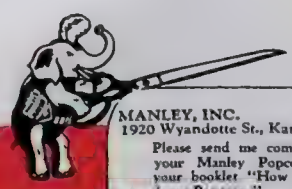
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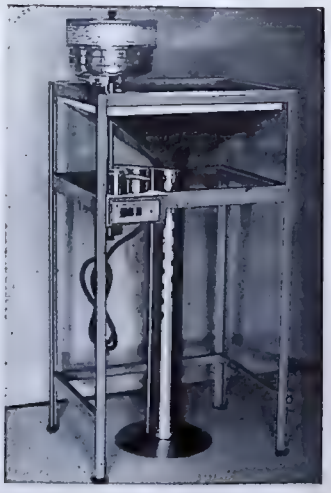


HOLLYWOOD MODEL 48—A brilliant beauty with a satin-like stainless steel finish. The last word in looks, control and production.

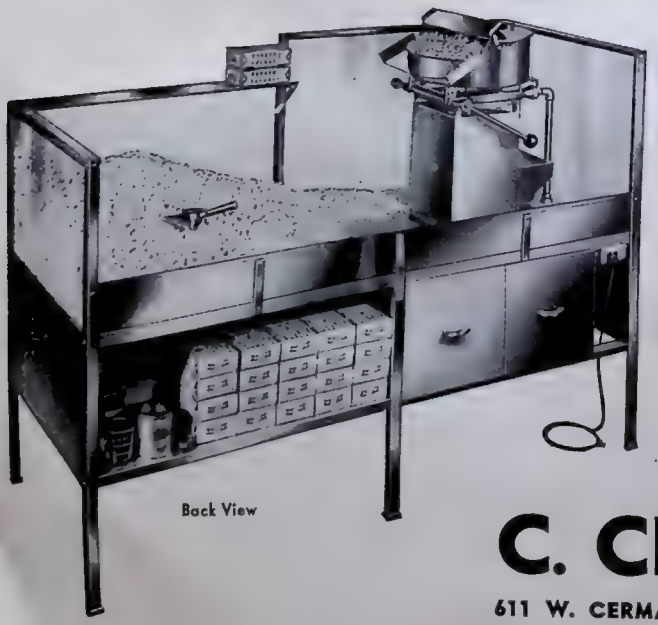
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Greater Popping Quality
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Store It Anywhere
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FOUR 10 LB. CANS TO CASE — ALSO PACKED IN 100 LB. BAGS



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TELEVISION *and* 16 mm. FILM

1949-50

Theatre Television Today and Tomorrow

A Shrewd Analysis* of Television in its Relation To the Theatre and its Use as a Boxoffice Help

By NATHAN L. HALPERN
Television Consultant to Fabian Theatres, Inc., American Theatres Corporation, and Theatre Owners of America, Inc.

BRIEF: ***Television, like Julius Caesar, "came," "saw," and "conquered" the imaginations and purses of many Americans during its rise to a commercial entertainment reality . . . Production of receivers is still growing by leaps and bounds every day . . . to prove beyond any shadow of a doubt that television is here to stay . . . This new wonder, with its unique ability to capture the immediacy of events as they transpire . . . is destined to assume greater popularity with the passage of the years . . . More and more homes will install sets, and more and more stations will be erected.***

Many theatremen . . . as though fleeing desperately from a ferocious caged animal suddenly let loose . . . have tumbled over one another in worried confusion as to how television has already affected the boxoffice and what terrible havoc this "monster" will wreak in the future . . . Fortunately, a few generals in the 2½ billion dollar motion picture industry have been able to dispel the terror in the ranks of their followers . . . by simply pointing out the tried and true adage that "the best defense is a good offense" . . . With this philosophy in mind, they have counter-attacked, bent on converting a foe into a formidable ally . . . Instead of concerning themselves with plotting ways to prevent television from wrecking the industry as little as possible, they have concentrated on ways and means of putting video to work for the theatre.

Since theatre television presentations of sports and other special events have already proven to be overwhelmingly successful, there seems little reason why television cannot be converted into a valuable adjunct to regular film showings . . . There are many technical problems involved, of course . . . and the cost of theatre television equipment remains relatively high . . . but these obstacles can be overcome with the same dogged ingenuity and hard work which preceded widespread introduction of sound into the theatre.

The following article meets realistically the many questions raised about theatre television . . . and presents a concise analysis of the situation as it is today . . . A calm and unbiased survey, it should serve as an excellent palliative to any theatremen who have been tossing in their sleep, counting flocks of "awesome" television sets instead of sheep.

This is a period of great change in the information and entertainment industries. While old and established parts of these industries are undergoing deep economic and organizational adjustments, a new colossus is emerging into prominent position.

The Challenge of Television

Television up to now has meant television broadcasting into homes. Here are some of television's current vital statistics. It is already—almost at the start—a billion dollar industry. There will be about three million sets in homes by the end of this year. Low and middle income groups are buying television sets in sufficient quantities to make television a popular, mass medium. It is estimated that perhaps as many as twenty million people saw some portion of the recent World Series on television. There are more than 80 television stations on the air and seven to eight hundred and perhaps more are expected eventually. There are networks extending down the Atlantic seaboard and as far as St. Louis into the Middle West. In order to bridge the remainder of the continent, television has borrowed from the motion picture industry by recording their programs on film and shipping prints to outlying television stations. Already, it is estimated that twenty million dollars may be spent during this year on programs alone, without counting the cost of time purchased on networks and stations—and this amount is being spent when there are only a few million television sets. It is estimated that there will be twenty million television sets in homes by the end of 1953. And there will be four or five cross-country television networks in a few years.

Improved Television Programs for the Home

Television is undoubtedly the fastest growing industry in the United States. In its so-called infancy, it is spending large sums for talent and production of television shows. As the advertising money for television increases, it will be available for buying the greatest stars, the finest writers, the best producers and directors in show business, and the most efficient technical skills. Already, a leading critic like Jack Gould of the New York Times has characterized some television programs as approaching close to "achieving the panoramic sweep of Hollywood" and "gaining strength from the sense of actuality and immediacy which distinguishes real television from the moving pictures."

** Reprint of an address delivered November 8, 1949, before the Motion Picture Theatre Owners of St. Louis, Eastern Missouri and Southern Illinois Convention in St. Louis.*

The Impact of Television on Theatre Attendance

Of significant importance to the motion picture industry is the result that television broadcasts keep people at home more than before. Every public survey conducted on the subject shows television usurping time and money previously spent on other competing forms of entertainment and information. Every public survey which has inquired into the impact of television viewing on motion picture attendance shows a marked decrease in movie attendance in those homes owning television sets. What's more, repeat surveys conducted a year or more later in the same homes show that the people continue to watch television at home.

The extent of the eventual impact of television on motion picture theatre attendance is not yet determinable. But a few things are certain—there will be more homes with television sets, and there will be more and better television programs. Whatever happens, you may be assured of one thing—television broadcasting will not increase overall theatre attendance: it is only a question of how much it may decrease it. Of course, people still will want to go to the movies. But if they go less frequently, the drop in attendance may decrease or wipe out the margin of profit in some theatre operations. This is what theatre owners must ponder seriously.

Meeting the Challenge of Television

While television has been booming, the motion picture industry has been beset by internal problems resulting from falling revenues, anti-trust divorcement, readjusted distributor-exhibitor relationships and practices, decline in Hollywood production, and many other problems. Despite the preoccupation with these internal problems, it is essential for the industry to see clearly the nature of television, before it is too late. As I see it, there are two major positive actions which the motion picture industry can take to meet the challenge of television broadcasting and the distressing problem of lower attendance attributable to other factors: First, it can take positive steps to improve the quality of pictures and in sufficient numbers to attract more patrons to the theatres; Second, it can pour its talent, energy and money into the exciting, new field of theatre television.

The Start of Theatre Television

Theatre television has just entered the stage of commercial development. There are four theatres in the United States with theatre television equipment. There are an additional six to eight theatres which expect to be equipped within the next several months. There is a blueprint for equipping an entire television circuit of twenty-four theatres when requested connecting air channels are granted.

Already, there have been about seventy individual exhibitions of theatre television before the public which paid the admission price to see them. The performance of the television equipment under these commercial conditions has been of high order, considering the state of the art. Technically, the equipment works and the television pictures it produces are adequate for presentation to paying audiences. In every case, theatre television has attracted more people to the theatre than anticipated without it. One of the most encouraging things about theatre television to date has been its enthusiastic reception by the audiences in the theatres. In the main, the programs carried in theatre television in this earliest period have been sports and news events. The recent World Series, for instance, was carried by six theatres in five different cities as the games were played at Yankee Stadium and Ebbets Field. More than sixty calls and wires from such diverse parts as Kenosha, Wisconsin and Rome, Georgia were made by theatre owners to the office of the Baseball Commissioner inquiring about permission to carry the World Series if television equipment was available. However, equipment was not available in such quantities in time for the Series.

Costs of Equipment

The manufacturers are just gearing up for production of commercial theatre television equipment. RCA has announced that its first sets for theatres will cost $25,500, including supervision of installation. Paramount Pictures has announced that its type of television equipment will be available at about the same price. Once orders are received in quantity, wholesale production can take place rapidly. Also, volume production in the future probably will bring down the price of equipment, a necessary adjustment for smaller theatres. Equipment probably will be improved technically, as the years go by, but as Mr. Si Fabian has said: "If we theatre owners sit by and wait for perfection, the television parade will pass us by."

There are basically two types of theatre television equipment: the instantaneous type, which shows the television picture on a large directional screen at the very instant the event is taking place; and the film-storage type, which records the television image on film which, in turn, is processed within less than one minute and is ready for showing on the regular theatre screen through the regular film projector. There are advantages and disadvantages to both types. RCA is the prime mover of the instantaneous type, although it also offers the film-storage system, while Paramount Pictures advocates the film-storage type.

The smallest screen used for theatre television is 15 by 20 feet, more than 300 times the size of the largest 16 inch home receiver screen. Those sets which throw pictures on 7 by 9 feet or similar size screens are not true theatre television—perhaps they should be called "club television" for they are used mainly in clubs for special events.

Costs of Installation and Operation

Besides equipment outlay, installation costs for the instantaneous type are relatively small, unless unusual circumstnces arise in a particuar theatre. The film-storage installation may be somewhat higher in some cases. Of course, for any group which contemplates originating and networking programs, there are substantial investments involved in cameras, mobile equipment, perhaps studios, transmitting and relay facilities and similar items, but this is not relevant to any individual theatre costs. Some leading exhibitors have indicated that they expect to amortize their television equipment within the first year if the events are available. From experience gathered in theatres showing television, thus far operating costs have been exceeded in nearly every relevant case by the additional boxoffice attracted by the television event. Furthermore, concession revenues during many theatre television events have tripled and quadrupled.

Programs for Theatre Television

These are some of the basic facts about theatre television. The problem which is uppermost in theatre owners' minds is what use can be made of this new instrument to attract the public to the theatre. The programs, above all, will determine the success of theatre television, as they do for any entertainment and information medium. Today, at this early period, it is possible to do a little sketching of some of the possibilities in theatre television programming. However, the theatre television program schedule will arrive only as various programs are tried and tested by the public's choice at the boxoffice, just as for films today. Let me state clearly that I regard theatre television programs as a desirable supplementary attraction to the basic feature films of theatres. Theatre television is not intended to supplant the quality films produced by Hollywood. It is intended to attract more people to the theatre so that the films themselves will play to larger audiences.

Sports and News Programs

In sports and outstanding news events, the importance of theatre television seems clear. Traditionally, during great events, boxoffice in most theatres suffered depression. Theatre television is the first instrument which has come along to enable theatre owners to convert depression into prosperity on such occasions. How many events of this type are there each year? The answer varies with the section of the country and the type and location of the theatre. In general, however, there seem to be twenty to thirty events annually which fall into this category for most theatres. It is significant, too, that the growth and promotion of sports, new and old, is continually increasing the public attendance at such events. United States Department of Commerce figures show that professional baseball took in four times as much money last year as in 1929; professional football increased business by 1000%; hockey by 266%; college football by 463%; and horse and dog racing by 1950%. The continued growth of these sports will create more competition for future theatre-going; however, it can also add new sport events to the theatre television schedule and thereby attract additional people to the theatre.

THE NEW RCA TELEVISION PROJECTOR that is now in production is capable of developing a very acceptable picture on a 20 by 15 foot screen. This is the model that worked successfully through the 1949 World Series in theatres in Boston, Brooklyn and Scranton. Seen with it are Barton Kreuzer, head of RCA's Theatre and Film Recording Dept., and Si Fabian, pioneering head of the Fabian Theatres Corp.



Expanding Sports and News Interest

Speedier modern communications like television and facsimile newspapers will continue to bring special news events to the more prominent attention of the public. If radio used to keep so many people at home listening to President Roosevelt's fireside chats, what will television do for similar events? And with up-to-the-minute newspapers delivered to home sets by facsimile broadcasts, would not this new gadget make the public's stay at home an even more interesting experience? Surely we are at an historical period in which news is of overriding importance in our daily lives, and the changes and vicissitudes in world events come with faster tempo and increasing frequency. The theatres deserve the finest up-to-the-minute news via the immediacy of theatre television.

We cannot measure the future impact of sports and news upon theatre-going only by past history. New inventions and new public habits are being created to increase the importance of sports and news events to the stay-at-home public and to the sports-attending public, with inevitable new impact upon theatre-going. What may be twenty to thirty significant events today may become forty to sixty events within the next period of time. Film newsreels coming after the event are no substitute for the immediate showing as the event takes place in theatre television. Any way you look at it, newsreels are day-before-yesterday's news, not today's.

Entertainment Programs

In the entertainment field, theatre television may grow less quickly. For one thing, sports and news events are ready-made programs, less difficult to televise, as broadcasters will testify. For another, theatre entertainment via television must be good enough to be side by side with feature films. For these and other reasons, the entertainment offerings of theatre television will probably be somewhat longer in coming. Some think that they may never come.

It should be remembered, however, that every medium communicating sight and/or sound has become an outlet for entertainment talents. The first radio in this country emphasized news coverage like Harding's election to the Presidency. Inevitably, during later years the entertainers opened up radio for home entertainment. So with television, in which sports and news events predominated even a year ago. But, inevitably, great entertainers like Milton Berle and Ed Wynn have joined the television bandwagon—and very early in its history too. More and greater entertainment will find its way into the home through television. I believe that the great show people of motion pictures can develop even greater entertainment in theatre television.

A New and Different Entertainment

Theatre television will differ necessarily from home television, requiring a theatrical format, not restricted by the lensing common to informal, home television. The entertainment may lean more towards large-scale productions. Perhaps it will be possible to arrange with producers for simultaneous telecasting across-the-country of openings of plays on Broadway, with all the sense of immediacy and excitement of the first night. Many of the fine shows of the Radio City Music Hall, or similar theatres, might be telecast to a circuit of theatres. For select art houses, Metropolitan operas and Carnegie Hall concerts might be exciting prospects.

Theatre television will differ also from theatre film fare. Perhaps television drama would suffer too much by comparison with Hollywood film product, but comedy, variety and musical shows can be developed in a different manner than films to the greater entertainment and satisfaction of theatre patrons. For example, the immediacy of television will enable top comedians to use their topical material, heretofore unused because of the timelessness of films. Now, like life itself, comedy can be up-to-the-minute by television. The building of entertaining musical and variety shows for theatre television can be done for a small fraction of the cost of the gradiose Hollywood productions—and still attract and please the public. Film shorts cannot present the top talent in spontaneous attractions at the relatively low costs of theatre television. In my opinion, the immediacy, spontaneity and timing which characterize television will stimulate special theatrical entertainment which utilizes these characteristics to the fullest extent.

Public Service Programs

Another significant use of theatre television lies in the field of public service. Traditionally, theatres have served their communities as meeting and collection places for civic causes. Theatre television will provide for the first time an opportunity for expanding such public services to include many theatres simultaneously, and to pick up events of local interest which originate outside the theatre. Possible local tie-ups may be made by theatres with school systems to serve educational purposes in morning hours when the theatres are not open normally. An interesting aspect of theatre television is that it may permit the only truly localized use of television, since the scarcity of television frequencies and stiff costs may restrict television broadcasting only to a general service, rather than developing local, segmentized services.

Exclusive Programs for Theatres Only

These are some of the program potentials, as I see them. Others see them differently. Everyone is entitled to his opinion on which shows are likely to succeed for, as the adage goes, everybody is in two businesses, his own and show business. No matter what types of pro-

EAGER BASEBALL FANS during the 1949 World Series await the opening of the boxoffice at Fabian's Fox, Brooklyn, where direct television was sold at $1.20 including a double film feature. The afternoon gross was stated by enthusiastic Si Fabian to be "five times normal".



grams prove successful eventually, it is clear beyond doubt that this medium must stand on its own feet by developing programs exclusively for theatres.

The profitable future of theatre television thus lies in exclusive programs available only in the theatre. In fact, theatre television cannot be properly tested for results until it is fed with exclusive programs.

The development of outstanding programs or purchase of sporting events exclusively for theatre television awaits the equipment of sufficient theatres. From experience in this and the broadcasting field, I expect that theatre television can compete successfully for exclusive television rights to outstanding sports events when about twenty-five good-sized theatres have been equipped and are capable of being interconnected easily. It is of profound significance for the future of the theatre television industry that it may take only about twenty-five theatres out of the nineteen thousand theatres in the United States to buy exclusive nation-wide television rights to major events.

With the equipment and interconnection of about fifty good-sized theatres, it will become possible to program exclusive television entertainment regularly in the theatres. From this number of theatres, more money can be made available, plus profit, for program production than is paid out today for any regular entertainment program in television. These financial facts underscore the sound economic structure for building theatre television.

The Outlook for Exclusive Programs

In negotiations with the owners and promoters of outstanding national sports events, I have found a keen desire on their part to participate in theatre television because they see in it a great opportunity to expand their attractions to a new paying public. For example, the Baseball Commissioner, Mr. A. B. Chandler, was quoted recently by The Sporting News, the official baseball publication, as follows: "I believe that nothing can stop the development of World Series video on theatre screens, and that we are approaching a vast benefit for all baseball." Mr. Chandler went on to say that he envisioned an annual return of $1,000,000 from theatre television for the World Series, a revenue far greater than that from any other medium heretofore. And, you know, the interesting thing is that if only one thousand out of the nineteen thousand theatres in the country were equipped for television and interconnected, one thousand dollars from each theatre for the entire Series would produce one million dollars. Of more than passing interest is the report that this year's Series' nation-wide television rights were purchased for a figure near $200,000. Sports owners and promoters have been reserving theatre television rights for the day when theatres would demand them. The opportunities for exclusive rights to sporting events in theatre television beckon with potential profit for all theatres who enter this field.

The Non-Exclusive Program Period

Pending the equipment of enough theatres for television, the few individual theatres in theatre television necessarily must pioneer the field by arranging to obtain television programs being broadcast generally to the homes and public places. It may be possible occasionally to get a worthwhile exclusive with just a few theatres, and work has been done to that end, but the main diet for the immediate present for the infant theatre television will necessarily be the pablum of non-exclusives. It is noteworthy that under these circumstances, theatre television has managed to draw considerable additional public to the theatres, even selling out at times. It should be stated that arrangements for broadcast programs require clearances with the owners of the programs, the television networks and stations, the sponsors and others. From experience thus far, I have found most parties cooperative with theatre television.

It should not be necessary to caution against judging the future of theatre television on the basis of any single event or program, and particularly when the program is available on all public sets. The wonder of it is that the theatres attract so many people to large-screen television on a paying basis when it is available free of charge in the homes. Imagine, for example, what the boxoffice of a top feature film like "Jolson Sings Again" might be if film prints were being shown free of charge on several million projectors in private homes at the same time that the theatres were playing the picture. This is the situation in theatre television so long as the non-exclusive program period continues and until sufficient theatres are equipped and exclusive programs are obtained.

The Chicken and Egg in Theatre Television

Theatre television thus is faced with the well-known situation of which comes first, the chicken or the egg. Many theatre owners are willing to buy television equipment for their theatres but they want to be assured of exclusive, outstanding television programs. On the other hand, exclusive, outstanding television programs cannot be available until there are sufficient theatres equipped for television. The only answer seems to be that both the chicken and the egg come first together. Both must be developed simultaneously, but it will take courage by pioneering theatre owners to take the plunge without an established program service already in effect. This is no different than the situation confronting television broadcasters who have pioneered without the assurance of outstanding programs and without waiting for enough sets to be sold into the homes to raise advertising money for programming. This too was the situation when

THE TRUE TEST of the value of exclusive television programs was probably best illustrated at the Comerford-Publix West Side, Scranton, Pa. This was outside of the television area so that there were no home sets to compete and at regular admission scales each afternoon was S. R. O.



the first sound equipment was available to theatre owners at a time when there was not enough film talkie product to guarantee that the investment in sound equipment was prudent. When the Warner Brothers' historic picture "The Jazz Singer" was released, only about 160 theatres were wired for sound while silents played in 7,500 theatres. As a matter of fact, the sound-equipped theatres were brave indeed because sound was decried in the industry and doubting Thomases considered it merely as a novelty. It always takes men of courage and business vision to lead a field: fortunately, theatre television is being pioneered by the Balabans, Skouras, Fabians, Pinanskis and Goldensons. While on this subject, I think the industry owes the Fabian organization a debt of gratitude for bringing television out of the laboratory into commercial theatre operation, thereby advancing the timetable of theatre television by a year or more.

The Motion Picture Theatre Investment

There's a lot of money invested in theatres in the motion picture industry—about 2½ billion dollars. This investment represents not only a lot of money but also a lot of faith in the availability of film product in number and quality to attract enough people to make the investment pay. When the early theatre owners first built or bought theatres, they had no assurance that sufficient quality films would be produced for them. Later in the history of motion pictures, the pioneering theatre men who installed the first sound equipment had no assurance that there would be enough pictures produced with good sound to play in their theatres. It took faith and confidence in the motion picture industry to take the historic hurdles and develop the industry to the unprecedented heights it has reached. If theatre owners had waited for gilt-edged guarantees that motion pictures would be sufficiently attractive to play to ninety million people regularly who would pay nearly 1½ billion dollars in a year at the boxoffice to see and hear films, we would not have had motion pictures and sound, as we know them today.

The Television Investment

Today, radio broadcasters are showing their confidence by investing the bulk of the money being spent in television. When most television broadcasters built their stations, they did not know what kind of programs would go over, nor where they would come from, nor when and whether they would be profitable. And still they have invested an average of $500,000 for individual stations. On top of the initial investment, television owners are paying out hundreds of thousands of dollars each to foot the bills for operating losses which they are not sure will stop for some time yet—if ever. That takes faith—and the broadcasters have shown confidence in their ability to produce programs in the future that will make television broadcasting profitable.

It is estimated that the investment in tangible property of the entire radio broadcasting industry is about $150,000,000. Already the broadcasters may have invested in television an amount exceeding the depreciated value of their entire tangible property, thereby getting in on the ground floor of what is already a billion dollar industry destined to grow many times over. On the other hand, the motion picture theatre industry, with a total investment of $2,500,000,00, has not yet moved forward prominently into television.

The comparison is important. The 150 million dollar radio broadcasting industry is developing the new television colossus. The 2½ billion dollar theatre industry has not yet begun seriously to take up the challenge of theatre television. The broadcasters in television have invested an average of nearly $500,000 per station for television equipment. Theatre owners can buy theatre television equipment at about $25,000 per theatre. Television broadcasters are operating at staggering losses from about $100,000 per station to as much as $2,000,000 annually for a network flagship station. There is hope but not sight of an end to these operating losses. From existing experience, it appears possible for theatre owners to operate theatre television in the black from the very beginning.

The Way Ahead In Theatre Television

For those in the motion picture industry who see the tremendous future of television, and who want to be part of that future, theatre television is ready and waiting. Theatre television represents for the first time a natural and logical opportunity for the motion picture industry to enter the television field. Theatre television is a dynamic challenge to the motion picture theatre industry. It has the vitality and showman's color to stimulate theatre attractions at a time when it is needed. Theatre television has the capacity to increase attendance and profits; it has demonstrated this practically from the outset of commercial operations. It will also bring promotional value to the theatre, as it has already, thereby building larger attendance. To the motion picture producers and distributors, theatre television represents an added attraction which may prove a lifesaver in stimulating larger audiences to come to the theatres where their pictures are played. Some of them may want to produce for theatre television too. To talent everywhere, theatre television may afford a new and inviting opportunity to help create a new medium employing their services. To the public, theatre television will provide a new program service for its enjoyment and entertainment.

As good as it seems, the road ahead to theatre television is not paved with honey. It's a difficult road ahead. It is a difficult decision for a theatre owner to make the necessary outlays to equip theatres for television. Then there is the difficult problem of programs for theatre television. And there are the operating problems of new theatre labor relationships, telephone lines for carrying television, local building department approvals, new promotions and many other offshoots to building a new adjunct to the film business. Then again there is the problem of a central agency to arrange for supplying programs to networks of theatres. For one can envision the day when there will be networks furnishing programs on a nation-wide basis for theatre television. This raises questions about the interconnection of theatres within areas and eventually across the country.

Air Channels for Theatre Television

To this end, as well as to assure flexibility and quality of programs, it is necessary and desirable for the industry to seek from the Federal Communications Commission an allocation of air channels specifically for theatre television, just as the government has allocated special frequencies to the broadcasting, oil, taxi, and railroad industries, and others. Unless these channels are requested quickly, the motion picture industry is in danger of losing them by default. For the air spectrum is already crowded by allocations and requests, so that laxity or tardiness by the motion picture industry may result in permanent forfeiture of air channels, which once assigned to another purpose are lost forever to theatre television.

I believe that theatre owners should be in the forefront of the industry in requesting these channels for a theatre television service to the public because as the name itself implies, this television service is based upon the theatres. Mr. Gael Sullivan, Executive Director of TOA, has done valuable work to protect these channels for the industry and to alert theatre owners to the issues involved; the resolutions and interest of regional TOA meetings resulting in petitions on the matter are of solid value to the all-industry effort in this direction.

Color Theatre Television

Another signpost on the road ahead to theatre television points to the development of color theatre television. Those who have seen color television, which may become a broadcasting service in the next several years, know the attraction of color pictures in home sets. Theatre showmen know the attraction of beautiful color films. Color theatre television can bring a competitive attraction to the theatre which will enthuse the public. Accordingly, the last annual convention of the Theatre Owners of America, representing 9,000 theatres in the United States, adopted a resolution endorsing the development of a practical color theatre television system as soon as possible.

Better Early Than Too Late

I have tried to touch all four bases in giving a roundup of theatre television today and tomorrow. This is an early stage in theatre television but like television broadcasting itself, probably it will grow suddenly and widely when it takes hold. In the swift-moving television field, it is better perhaps to be early, than to be too late. The motion picture industry has a marvelous opportunity ahead, and theatres in particular have in theatre television the means to maintain and improve the finest entertainment and information service to the public.

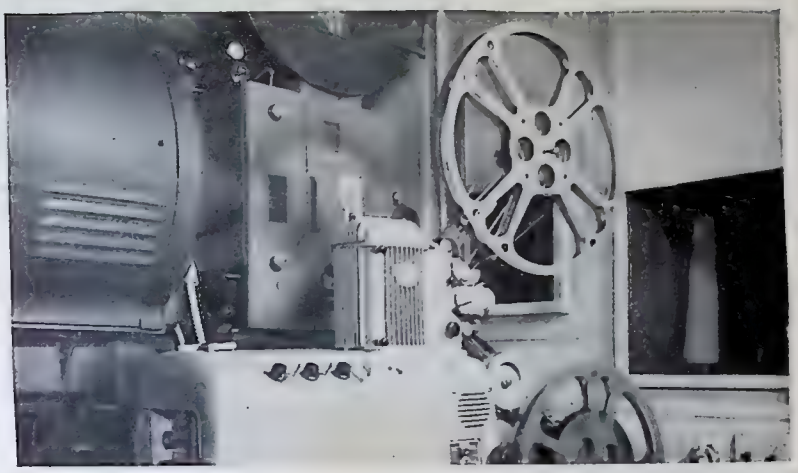
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The screening room, which might best be properly described as a "capsule-size" theatre, has achieved renown in the motion picture industry itself as an ideal place for previews of new pictures before prospective exhibitors and bookers. In recent years, however, as business in general has become increasingly aware of the value of the motion picture as a sales or training medium, screening room facilities have been in great demand by outside sources for these purposes.

The widespread use of screening rooms by private industry has, however, often been obstructed by the fact that most of them are equipped with 35mm. projection machines only, whereas the vast majority of commercial prints and educational prints are on 16mm. film. This obstacle has frequently deprived not only theatre industry screening rooms, but hotels and night clubs equipped with projection facilities of the extra revenue to be gained from alternate showings.

The "Film Center Theatre"

In an effort to combat this problem, the Bonded Film Storage Company of New York recently built a miniature theatre with provisions for both 35mm. and 16mm. film showings. The projection room of the 60-seat house contains an Ampro 16mm. projector situated directly beside two regular RCA 35mm. machines, and either projector may be used as occasion requires.

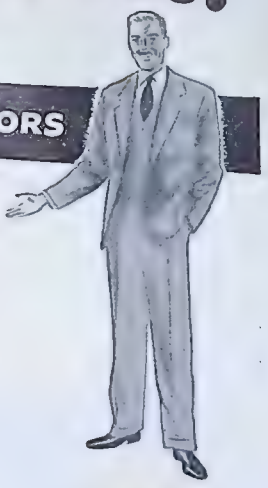
Fully equipped for trade, private, and business motion picture showings, the theatre consists of a comfortable reception-waiting room and an auditorium luxuriously finished in the latest decor. The former room, said to be the only one of its kind possessed by a company in the New York area, is furnished with lounges, chairs, and other facilities for added comfort and privacy. The auditorium itself provides all the conveniences of a conventional theatre with its cushioned chairs, healthful air conditioning, and soft, indirect lighting.

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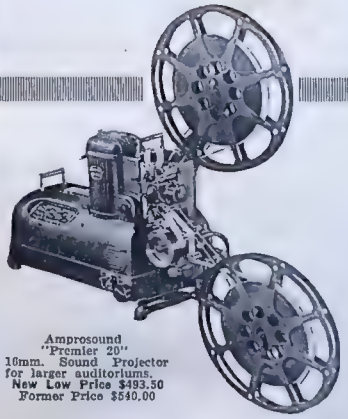
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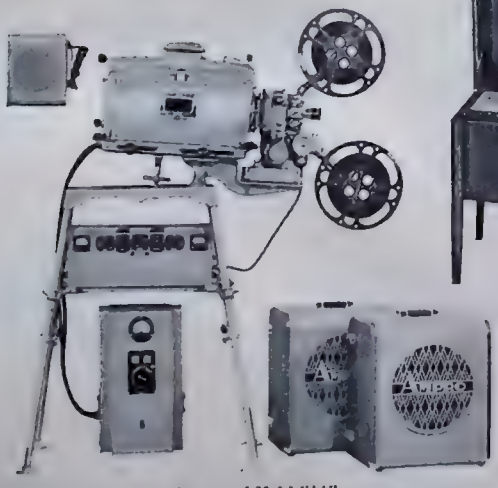
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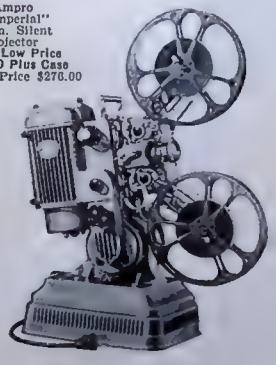


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● what experienced owners and circuit executives have learned about theatre financing, amortization, appraisal, budgeting and profit. Treasury Department rulings on depreciation, capital gains, tax handling and payrolls. And sanitary maintenance, replacement services, advertising routines, and other practices that reflect on patron acceptance, and on the trends in modern management.

AUDITORIUM AND STAGE DATA

● from elementary facts about "black light" and its new "packaged" murals through all of the myriad considerations of acoustics, interior lighting, selection of the proper dimmer system, emergency and standby power, sight lines, staggered seating, floor slopes, view angles, + discussions of cleaning, personnel, patron services, and patron conveniences are adequately surveyed.

SUPPLIES AND NEW PRODUCTS

● arranged in a comprehensive orderly manner in relation to their use in the theatre building. All supply dealers and equipment experts throughout the world are listed geographically so that at times of building or buying, not only the needed products but the men who serve them in any particular locale are at instant hand. Plus all of the little items necessary to the theatre.

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● how to set the character of a theatre through local contact and effort, plus the advertising, trailers, sign work and stunts that contribute to the desired result. Numerous "other than picture" services and ballyhoo that sell the theatre building and its comforts. Public relations as it applies to all types of theatres whether drive-in or roofed. The physical side of advertising.

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